

DEDICATED
TO
THE CHILDREN
AT
GARRISON LANE NURSERY SCHOOL
BIRMINGHAM

UNDERSTANDING THE YOUNG CHILD

BY

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FOREWORD

THE introduction to a book always seems destined to be written last of all. When a book is first projected, the writer has high hopes and vaulting ambitions, and as he writes, compiles, checks, deletes, and adds, his hopes dim and his ambitions become more modestly circumscribed. The chapters finished, he writes his *apologia pro libro suo*.

In the spring of 1941 Sir Wilson Jameson, Chief Medical Officer to the Ministry of Health and Board of Education in England and Wales, discussed with Professor E. A. Bott, of the University of Toronto, who was in England at the time, some of the problems of child-care which had become pressing in Britain because of the evacuation of so many children into reception areas. On his return to Canada, Professor Bott suggested to President Cody, of the University of Toronto, that some assistance from Canada might be offered, and so, when Sir Wilson Jameson visited the University of Toronto in the autumn, he invited Dr. C. M. Hincks, the Director of the Committee for Mental Hygiene of Canada, Professor Stuart Jaffray, of the Department of Social Work of the University of Toronto, and the present writer, to visit Great Britain and determine in what manner assistance might be given.

We three travelled to England in the autumn of 1941 and, received with generous hospitality, were given an opportunity to visit Reception Areas, Residential and Day Nurseries, Hostels, Evacuated Areas, etc. Dr. Hincks, after consultation with the Hon. Vincent Massey, Canadian High Commissioner to Great Britain, suggested that Canadians would welcome an opportunity to help. His offer was graciously accepted, and on his return to

Canada he organised the Canadian Children's Service. Three teams of workers were organised and arrived in England during the early summer of 1942: (a) a group of Elementary School Teachers who were to work under the auspices of the London County Council in the Infant and Junior Schools in the Metropolitan area; (b) a group of Psychiatric Social Workers who were to assist in the supervision of the children evacuated into the Reception Areas; and (c) a group of Nursery School Teachers recruited from the staff of the Institute for Child Study of the University of Toronto and from other Nursery Centres in Canada. This last group consisted of: Miss M. I. Fletcher, Principal of St. George's Nursery School in the Institute for Child Study, University of Toronto; Miss D. A. Millichamp, M.A., Assistant-Director of the Institute; Miss A. L. Harris, B.A., of Windy Ridge Day School, Toronto; Miss Mary Wright, M.A., Protestant Children's Home, Ottawa; Miss Margaret Hincks, M.A., University of Michigan Nursery School; Miss E. Hamilton, Elmwood School, Ottawa; Miss A. Mack, St. George's School, Ottawa; Miss J. Cornish Bowden, Havergal Ladies' College Junior School, Toronto; Miss N. Griffin, The Study, Montreal; Mrs. M. McF. Smith, M.A., Manor Road Nursery School, Toronto. The last three are now acting as Supervisors of the Nursery School Teachers in the emergency Wartime Nurseries in Birmingham, of which there are 72 already organised. The first three teachers have returned to Canada to help with the organisation of the Nursery Schools in Toronto under the War-Emergency Plan. The Nursery School group organised and staffed the training centre at Birmingham for the purpose of preparing, as quickly as possible, the many Child Care Reservists who were needed to staff the emergency Wartime Nurseries which were already being organised in that community,

and the Nursery Classes in Birmingham Infant Schools. The writer was privileged to supervise this group of workers.

During our previous visit we had been told that the Birmingham authorities would welcome our help. A brief visit to the city in February 1942; a meeting with a small group of the Education Committee; a visit to several buildings with Mr. W. T. Benslyn, the School Architect, and Mr. R. E. Cousens, Assistant-Director of Education, resulted in the choice of Garrison Lane School as the seat of our future activities. The speed with which the decisions were made rather surprised us, who had been brought up on the myth that an "Englishman always moves slowly—even though surely." We were even more astonished when a cable arrived in Toronto on May 1st, 1942 (the date which had been set for the completion of the rather extensive alterations to this old, partly blitzed school), saying, "School ready. When do you arrive?"

Six of us set out at once, and Garrison Lane Nursery Training School opened its doors on July 1st, 1942, to forty-two children between the ages of two and five and forty student Child Care Reservists, much older. At a meeting in London with Mr. C. W. Maudslay, Mr. E. R. W. Sage, Miss M. C. L. Greaves, and Dr. Dorothy Llewellyn, of the Child Care Division of the Board of Education, together with Mr. F. T. Arnold, H.M. Inspector of Schools, Mr. R. E. Cousens, and the writer, the curriculum was discussed and we were able to fit our teaching programme into the scheme of training Child Care Reserve personnel already organised under the supervision of Miss Greaves and Dr. Llewellyn.

Text-books describing our plan of training were impossible to obtain from Canada, and, since the systematic approach to child psychology which we are teaching

is somewhat different from the methods employed in Britain, we felt that a brief outline might be of assistance to the students who, after far too little training, had to participate in caring for the children in the Wartime Nurseries. This book may serve as an outline for these students.

The plan of the book was outlined on a west-bound transport (a very large one), with the help of Miss Harris, Miss Fletcher, and Miss Millichamp, who were returning to Canada after organising the Garrison Lane Nursery Training School programme. The greater part of the book was written in Toronto and partly edited on another transport, the sister-ship, on the way back to England in the spring of 1943. The final draft was written partly at Garrison Lane Nursery Training School and partly in the comfortable living-room of my English host, Mr. Shapiro, of the University of Birmingham.

The writing of a book of this kind depends on the efforts of many collaborators. Acknowledgements are made to the staff of the Institute for Child Study and of Windy Ridge Day School at Toronto; to the Staff of Garrison Lane Nursery Training School; to Miss Anne Harris, who helped with the initial draft; to Miss Elisabeth Burns, who prepared the final draft; and especially to Mr. I. A. Shapiro, who read the completed manuscript and offered invaluable suggestions and criticisms.

Acknowledgement is also made to Dr. P. D. Innes, Director of Education, Birmingham, for the many favours rendered by his staff to the Canadian teachers; to Mr. F. T. Arnold, H.M.I., who has been unfailing in his interest and tactful assistance; to Dr. J. R. Mitchell, School Medical Officer, for assigning Dr. D. M. Beaumont and Nurse L. Ingram to Garrison Lane Nursery School for regular duty, whose interest and industry are respon-

sible for the splendid record of health which the children have shown ; to Mr. R. E. Cousens for his unfailing courtesy during the many interruptions which he had to endure during the rather hectic period of inauguration, and the many others in Birmingham who have been so hospitable to a Canadian Group, away from home ; to Lieut.-Colonel D. C. Simson, who has had the responsibility for organising the Canadian Children's Service in Britain ; and to Mrs. Vincent Massey, who has unremittingly extended her hospitality to all Canadian groups.

W. E. BLATZ.

NURSERY TRAINING SCHOOL,
GARRISON LANE,
BIRMINGHAM.
1943.

CHAPTER I

• INTRODUCTION

SINCE the dawn of history, no doubt, parents have gazed upon their offspring, particularly upon their first-born, and have looked into the future. The savage in the forest, the squire in the manor, the peasant in the hovel; the artisan, the artist, the scientist, the labourer, the poor and the rich; the oppressed and the oppressor; the heathen, the Christian, the oriental, the occidental, the black and the white and the yellow; in democracies, totalitarian or monarchical states,—all parents share in a common experience.

“What is to become of him—or her?”; “He¹ shall have a better time than I”; “He shall have more opportunities than I”; “He will carry on where I leave off”; “He shall be as great as I”; “He shall join the Church”; “He shall inherit my factory, my practice, my business, my debts, my prejudices,” thinks the father, to himself.

The mother, perhaps long before the child is born, has similar thoughts and reveries. The anguish of childbirth may be somewhat assuaged by the hopes, desires, and wish-fulfilments of the future—the future of the child.

There are usually three questions which occur to most parents. What?, How?, and Why? What is he going to be? How can I arrange for this result? Why should I?

The first question is the most obvious and is usually to the forefront, often overshadowing if not excluding the other two. The parent is an idealist, as was Mr. Brown

¹ The masculine pronoun is used, not because the above applies only to sons, but because the repetition of “him or her, he or she” is awkward.

when, on sending his son to Rugby, he expressed the hope that "If he'll only turn out a brave, helpful, truth-telling Englishman and a gentleman and a Christian, that's all I want." He is governed by his idea of the desirable. Whether he thinks of a profession, a job, a position, honours, titles, or a personality, he is envisaging an ideal which he, the parent, has either attained or fallen somewhat short of accomplishing. The parent may be an arrogant, self-complacent citizen, in which case he hopes, as does the Philistine, that the child may grow up in his own image and likeness, or he may be one of the many who has failed to achieve his self-selected goal, in which case he looks for self-fulfilment in the child's endeavours.

For some time past it has been our custom, in conducting Parent Education Classes, to ask the members at the first meeting to write down "what they wished their children to be." In a recent group the following traits were suggested, in order of frequency. "I would like my child to be—happy, obedient, well-behaved, modest, good, healthy." This list is a fair sample of others. It is rather surprising that it did not include "prosperous." Perhaps, in the community from which this group had gathered, none of the parents expected their children to be prosperous. In a more prosperous neighbourhood this trait might have been well up in the list. Advancing civilisation has gradually influenced parents to anticipate ethical rather than material goals for their children.

At this juncture the reader is asked to write down the specific traits he would like to see in his child as he grows up. If the reader should have no children, he will find the task much easier.

(This space is provided for your list.)

It is relatively easy in other and narrower fields of human endeavour to name the desired qualities. In breeding racehorses one seeks in the offspring speed and endurance ; in raising pigs one seeks a nicely balanced ratio of lean and fat in the growing litter ; in raising chickens we try to induce the hens to lay " an egg a day," and so on. Even in the human field it is easy to define the desired characteristics when the field is narrowed : a bank clerk must be accurate, a steel worker should not be subject to dizziness, a railroad engineer should not be colour blind, a soldier must be brave—and so on. But we are dealing with children who at present have no specific end in view and for whom the choice is free.

Let us suppose, for purpose of illustration, that you have recorded the following traits : honesty, happiness, and obedience, and that your child is endowed with a larger and wider experience than he would normally have, and questions you with regard to the lessons which you teach. The following conversation may take place :

Father : " Honesty is the best policy."

" Best for what ? " asks the child.

" Honesty pays."

" Well, if honesty pays, am I to be honest because it pays ? "

" No ; honesty is a virtue."

" Well, then, is honesty its own reward ? " .

" I suppose so."

" How honest am I to be ? "

" Absolutely honest."

" Am I to say nothing that is false and suppress nothing that is true ? "

" Yes."

" When Mr. Jones left last night you told Mummy

he was a bore. Do you tell Mr. Jones he is a bore ? ”

“ No.”

“ Why not ? ”

“ Because that would be rude and unnecessarily unkind.”

“ But it is suppressing the truth ? ”

“ Yes.”

“ When are you justified in lying ? ”

“ Never.”

“ It’s complicated, isn’t it ! ”

“ I think it’s your bedtime now ! ” And if he were to ask you whether a diplomat or ambassador may lie, or an advertiser, or a physician, or a politician, you would find yourself again sending him to bed.

Again, you say to your child, “ I want you to be happy.”

“ What is happiness, Daddy ? ”

“ When you are contented you are happy.”

“ And when I want something I haven’t got, am I discontented ? ”

“ Yes.”

“ So in order to be happy I must not want anything I haven’t got ? ”

“ You should be satisfied with what you have.”

“ Well, then, why do you send me to school ? ”

“ Why not ? ”

“ Because I go there to get something I haven’t got, namely, knowledge.”

“ That’s different. You see, you must want to learn, you must be ambitious.”

“ But then I can’t be happy if I’m ambitious. Is it better to be unhappy ? ”

“ Isn’t that your mother calling you ? ” And you sit back and realise that happiness is a difficult thing to

explain, and if you are bewildered, perhaps your child is also a trifle confused.

Now, obedience is something that seems to have a solidarity about it. A child must be obedient, surely.

"What is obedience, Daddy?"

"It is doing what you are told to do."

"Should I always obey a command?"

"Yes."

"No matter if someone tells me to throw a stone at a window, am I supposed to obey?"

"Well, of course you must use judgement, you must never do what is not right."

"Am I to obey you?"

"Yes; I am your father."

"Will you never tell me to do anything I shouldn't do?"

"I hope not."

"And if you should, may I disobey?"

"Slip on your coat and let's take a walk; it's stopped raining." In silence you contemplate the eternal conflict between the individual conscience and the higher authority, and your child trudging along beside you finds the problem a little bewildering too. Perhaps a training in rigid obedience hardly prepares the child for solving this problem. Blind obedience is the fundamental basis of fascism, but, on the other hand, no obedience at all is the password to anarchy and chaos.

And you run through and comment upon the whole gamut of the virtues: generosity, but if he is too generous he will never put by anything for a rainy day; courageous, but he must stop short of being foolhardy; affectionate, but he must confine this to his mother and to me and his brothers and sisters, but after that he must be discriminating; cultured, but not a pedant, nor too

clever, nor a snob ; grateful, but not fawning ; modest, but not too retiring and shy ; humble, but he must stand up for himself ; courteous, but not hypocritical and formal. And so each one of the traits must be modified. Any attempt at defining, for a child's understanding, the exact point at which he must use judgement, before he has acquired judgement, is doomed to result only in confusion.

There may be a remedy, you think. Since the child learns to a marked degree through imitation, the parent may set himself (or herself) up as a paragon of all the virtues. This is easier for the father than for the mother ; he is with the child less often. But, disillusionment occurs sooner or later, depending on the skill of the parent and the discernment of the child. The danger is that the child may conclude that virtues are a childish game out of which one grows, as with fairy-tales.

It is not the intention of this chapter to belittle the virtues or qualities we have been discussing. Honesty, integrity, modesty, ambition, thoughtfulness, are all desirable qualities.¹ Without them civilised social life

¹ In this connection it seems pertinent to quote from the Preface of *Notes of Lessons on Moral Subjects*, by F. W. Hackwood (1885) : " Attention is now specially drawn to the Circular No. 153, addressed by the Education Department to her Majesty's Inspectors, on January 16th, 1878. This interesting and authoritative document intimates that ' My Lords are anxious that you should lose no suitable opportunity of impressing upon both managers and teachers the great responsibility which rests upon them, over and above the intellectual teaching, in regard to the moral training of the children committed to their charge. You will express your special approbation of all schools where, from the knowledge which you have gained by repeated visits, you observe that a high moral tone is maintained ; you will not fail to enlarge upon the Article (19a) in the Code respecting discipline, as showing the interest taken by Parliament and by their Lordships in this all-important subject ; and where it is not satisfactorily attended to, you will not hesitate to recommend a reduction of the grant. (*Italics our own.*) You will, in the spirit of the Article, urge the managers to do all in their power to secure that the teachers maintain a high standard of honesty, truth, and honour in their schools, and that they not only inculcate upon the children the general duty

would be impossible. The intention of this chapter is rather to emphasise the bewilderment which surrounds the child as he grows up. He finds that values change, that gods have clay feet, that expediency is often the substitute for clarity. He consequently gives lip service to a precept which he cynically discards in practice. He finds that an excuse is often given as a reason. This confusion makes teaching difficult and learning haphazard. The successful child grows up, it seems, in spite of, rather than because of, our attempts at rearing him. The unsuccessful child, i.e. a disobedient, boisterous, sly, vulgar, timid child, is looked upon as wilfully "bad" and must be "brought into line." The problem is to define the "line," and then how to bring him to it.

While waiting for a bus the other day I observed the following episode and jotted down the incidents. A lad of two or two-and-a-half years was sitting on the doorstep of a house, watching the horses of a large dray stamping at the kerb. A rather flustered mother came

of consideration and respect for others, but also the special duty of obedience to, and reverence for, their parents; and also to encourage such training in schools, in matters affecting their daily life, as may help to improve and raise the character of their homes."

The following are the chapter headings. Honesty, Truthfulness, Candour, Honour, Obedience to Parents, Love of Home, Industry, Perseverance, Patience, Government of Temper—or Self-control, Kindness—or Consideration for Others, Courtesy and Good Manners, Forgiveness and Forbearance, Peace, Duty, Punctuality, Order—Method, Painstaking and Accuracy, Contentment, Unselfishness and Self-denial, Benevolence and Humanity, Gratitude, Cheerfulness, Frugality and Thrift, Self-reliance, Self-respect, Temperance, Cleanliness, Modesty, Courage, Prudence, Zeal and Energy, Justice, Loyalty and Patriotism, Support of the Law, A Due Appreciation of Blessings, Magnanimity, Integrity of Purpose, Precept and Example, Formation of Character.

In the text, page 17, under "Candour," the following statement is made. "Candour will not allow Truth to be overshadowed by withholding part of the truth"; and then on page 28, under "Obedience to Parents," there is a footnote: "It is doubtful whether any allusion should be made to the possibility of some unfortunate children having wicked parents . . . where there is no moral obligation to obedience"! (*Exclamation point our own.*)

dashing out of the archway calling sharply, "Come on ! Dinner—come on !" and then, when the child paid no attention, strode up to him and said, "You're never about when your dinner's ready," (Punctuality.) Grasping his hand, she pulled him upright, but he squirmed and escaped. "You little tinker ! (*To a neighbour*) Ain't he smart ?" (Cleverness.) She pursued him as he ran on to a pile of bricks and bomb-debris. He picked up a stick and threw it at her. "You naughty boy, hitting your mother. Of all things !" (Gratitude, filial affection.) "Come on now, or you'll go without dinner." (Consequences.) And she finally picked him up bodily and gave him a resounding thwack. (Consequences.) He immediately set up a howl, whereupon she kissed him and cuddled him, with some endearing words (parental affection, sympathy), and then—stopped and talked to another neighbour, with the child wriggling in her arms, crying, "Want dinner—want dinner !" The mother shook him and said, "I wait for you often enough ; you wait for me now." (Justice.) Then the bus came.

This whole incident lasted eight minutes. During this period the child was learning. Obviously the concepts, justice, gratitude, etc., in brackets above, were not understood by the child. But it is by experience of this sort that he learns to think conceptually. In this short period many experiences occurred, to be stored up in consciousness. Each one leaves an imprint, deep or shallow. The accumulation of these myriads of daily experiences forms the sum-total of the child's past from which he will draw in the immediate present for his responses.

The incident is quoted to show (a) how apparently trivial incidents in the aggregate are important, (b) how inconsistent the "teaching" programme may be, and

(c) how difficult it will be for this child to clarify his experience into concepts as he later on cogitates and generalises.

The parents, in the home, are responsible for the supervision and teaching of the skills of social behaviour in its broadest aspect. This responsibility may be delegated for a time, but never given over wholly. The more complicated the society, the more aids are provided to the parents for carrying on this duty. The physician for health, the teacher for formal knowledge, the policeman for formal discipline, the tram-conductor for locomotion, among others. The parent is wise who uses as many aids as possible—but, the responsibility rests with the parent. The State, in a democracy, can never assume this prerogative. The State may *suggest* standards, may *arrange* safeguards, may institute plans, but these are only to assist the parents, never to replace them.

The standard set by the individual family group sets the community standard. The community, as such, cannot but reflect the standards of the individuals. An individual within the community may try to set standards differing from the accepted custom ; he will succeed or fail in his attempt, depending upon his skill in persuading the other individuals to adopt his plan. The parent is the keystone of the social structure. Any attempt to usurp this function destroys a free society and substitutes in its stead fascism or slavery.

The parent should be jealous of this prerogative, but should, on the other hand, be keen to use any assistance which may be offered. Assistance is of two kinds, (a) education, and (b) delegation of a task.

The State educates the farmer, the householder, the teacher, by means of pamphlets, courses, lectures, and the radio. Parent Education is still in its infancy. No one can deny the importance of Parent Education, but at

present a plan is needed and an organisation to further it.

Help in a more tangible way is given by providing schools. The school teacher is a parental aid. But the teacher, too, must understand children. She, too, must be taught child care, child development, and child training.

Which brings us to the second of the questions posed earlier. Having decided "What" we want, "How" can this result be achieved?

It is a relatively simple matter for the psychologist to study how learning proceeds and how to teach. At the present time much more needs to be discovered, but the psychologist can already give a fairly clear enunciation of the factors involved. This book is an attempt at such a plan. The psychologist, however, cannot, without stepping out of his rôle, state with any more assurance than any other human being whether children should or should not act in any particular way.

The psychologist can study the factors which influence a child's (or adult's) behaviour. He can determine, given time and opportunity, how children learn to steal. He may evolve a plan by which children may learn how to live without stealing. But *as a psychologist* he cannot say whether children should steal or not. If he expresses opinions on this point he ceases to be a psychologist and becomes a moralist. The parents (as members of a community) decide whether children should steal or not, smoke or not, dance or not, swear or not, attend church or not, etc. The psychologist will tell them the method by which their aims may be attained. He can also, after study, determine what will be the result of any restriction or commendation.

The psychologist can study how people "get like that," how some abhor smoking and drinking and others approve, how some are belligerent and others peaceful—

but it is not the rôle of the psychologist to dictate the form of social organisation to any community. It is his function to discover how a certain pattern comes about ; the individuals may choose whether to adopt the pattern or not. Given a social construction, the psychologist can study how to build it up or break it down.

Hitler, having a narrow view of social life, was able in a short time, through teaching, to build up his kind of society. It is often asked why we, in the democracies, do not follow his plan. It seemed so effective. The answer is simple. Learning is a fundamental process in all human beings. The German children learn in exactly the same way as English or French children. Teaching methods vary, but the secret of Hitler's success is not altogether the way he taught, but *what* he taught. There were no ambiguities : " You must be obedient, truthful to me alone, loyal to me alone, industrious and *unquestioning*." One can see that there were no doubts or confusions ; any who felt doubts were liquidated. Granted the premise that Hitler is always right, the system is not only logical, it is satisfying. Thus an apparently astonishing success was attained. Why can't we do that in a democracy ? We could, but it would not turn out as a democracy.

Fascism is static, democracy is dynamic. In a democracy laws and customs may be changed by a consensus. In a democracy the individual is free to act without the threat of physical violence. But obviously he hasn't unlimited choice. Abnormal behaviour, as judged by the community, is followed after due process of law by restriction of liberties, ostracism, denial of citizenship. It is readily understood how much more difficult it is to *learn* to fit into a democracy and also how difficult it is to *teach* such a project. Learning proceeds efficiently when teaching is *consistent*. The episode mentioned

above indicates how inconsistent was the teaching and how inefficient has been the learning, on the part of the child, to fit into the scheme. (He has learned quite efficiently how to badger his mother.)

Democracy can survive, not through legislation nor wishful thinking, but only if the integrity of the individual is preserved. In the past, the early years of a child's life were left to the haphazard training of the parents, the later years to the only slightly less haphazard training of more or less highly informed but not necessarily educated teachers, educated, that is, in the social sense. The wonder is not that democracy has been slow to evolve, but rather that it has evolved at all.

Granted the importance of the early years, it is obvious that parents need some help. When should this help be given? It is suggested that it should start from the age of two years, at which age the child achieves a social consciousness. By whom should it be given? By those who have special qualifications, through learning and practice, for training children. Hence the Nursery School, the place and need for which will be discussed later.

Here, it is only necessary to repeat—the parent is glad of the help of the doctor, dentist, nurse, teacher, etc., and the Nursery School teacher provides another pair of hands to make the task of raising children pleasanter and more efficient.

And now we come to the final question, "Why?". It is easy to ask and to answer "What should you teach?" and "How should you teach?", and time will prove the accuracy or inaccuracy of the answer. But when we ask, Why teach a child anything? Why have children? Why keep families together? Why have civilisation?, and so on, there is no technique whereby these questions may be answered, nor even studied, *scientifically*. When

we ask the question " Why ? " (and humans are the only beings who do ask it), we are presented with the phenomenon of faith, opinion, belief. The operation of these factors on human behaviour may be studied, but the essence of their being may not. The psychologist, as such, can no more study or explain *why* a child is alive and behaves as a human being than an astronomer can study and explain *why* a star is where it is and moves as it does, though he can describe how it is moving and whither and at what rate.

But, of course, the inaccessibility of the subject to research does not prevent us from having opinions about the *explanation* of human behaviour, and such opinions, sometimes called philosophy, commonly called religion, have for centuries been the starting-point of much human happiness and misery. Human beings in such fashion find it necessary to explain as well as to describe. It is interesting to watch this process taking form in a child, and this will be discussed later.

It must be stressed that parents are in the picture throughout as the most important factor in child rearing. Present at the beginning, they cannot retire, or rather should not, until the child grows up into a mature adult. (Maturity will be defined later.)

This book is, therefore, written primarily for parents and for any who help parents in the important task of child training. Obviously the results are happier if all know what and how and why the others are doing what they do. Furthermore, the system described is one for " normal " children. Assuming that most children are normal, the emphasis is placed upon training rather than treatment.

A system of child training must be judged on its merits. The merits are the type of adult into which the

child grows and the type of society he organises—i.e. the proof of the system is in the product that appears. There has been, in the past, too little interest in the product. A business, to be successful, must be interested in the success of its product in the field, not in the factory. The indifference shown towards its product by the educational system would spell bankruptcy to any business enterprise. This system, the biggest “business” in any nation, has been largely left to its own devices—and resources.

This book is a brief outline of the way children grow up and how they may be influenced. It makes no pretensions towards infallibility. The data in child psychology at the present day are still too new, too attenuated, and too undigested for such an attitude. On the other hand, in a book of this nature there may be an excuse for dogmatism. For the sake of clarity, the author has been dogmatic. Subsequent study may prove a good deal herein stated to be inaccurate; it would be surprising if such were not the case. But the book presents a system which at least holds together fairly well. Some of the “products” of this system have already reached maturity and, at present, it can be safely said that no harm has come to them. Furthermore, they seem to have enjoyed their infancy, childhood, and youth.

CHAPTER II

THE MEANING AND IMPORTANCE OF • CHILDHOOD

“YOUTH is a property of the living world.”¹ Motor-cars, books, fountain-pens, and tables are never young, they are new ; living beings are young, grow up, grow old, and die.

Among forms of life, from the lowliest, the amœba (disregarding the bacteria and the viruses), to the human, there are many types of birth, many variations in the duration of youth and great differences in the span of life and vigour.

The amœba may be said to have no youth at all. When the parent cell divides into two daughter cells, these are, to all intents and purposes, adults. They live their span of life and succumb, or they repeat the process of division without any apparent change in form or function.

Insects, in many cases, develop through a larval stage, which may be considered “youth” by a wide stretch of the imagination, and then emerge more or less suddenly into fully fledged adult life. Most birds are hatched in a more or less helpless condition and spend some time under the care of the parents before launching out on an adult career. In mammals, the period of youth becomes more apparent and, in the human, the period of youth is longest of all. It may be said that the human child is born youngest of all living creatures.

Youth is apparently a period of preparation for adult

¹ From *The Childhood of Animals* (Sir Peter Chalmers Mitchell : Pelican Series), an admirable account of the early life of animals written in such a manner that the general reader can both enjoy and profit by it.

life. It must not be considered independently, but as the biological fore-period for a later stage in which whatever destiny is foreshadowed for the individual may be fulfilled. It is important to emphasise this point, because, often, we are prone to interpret youth as important for its own sake. We often set up, for infancy and childhood, standards, ethics, and patterns of behaviour which conflict with the adult requirements. Human childhood, lasting about twenty years, is a period of exploration, not of crystallisation.

Many examples may be cited of attempts to harness youth with infantile standards or to saddle it with adult ones.

An example of the former may be seen on the cinema screen. The doting and economically far-seeing parents of the child star find it advantageous to preserve the infantilism of their offspring. This tendency may again be noted in the almost universal, not entirely feminine, tendency to disguise maturity and present a youthful appearance.

The opposite tendency, to impose adult standards of behaviour upon youth, may be illustrated by an incident which occurred some years ago in a small town in a Mid-Western State. It was the custom in this community to forgo Sunday cooking at home and dine at the hotel at noon, after church services. The dining-room was a meeting-place for the families of the neighbourhood. One family, including two children, boys, aged about four and six years, took their departure early (perhaps they had not been to church), and their progress past the other tables was interrupted by greetings and pleasantries. At each table each child was told, "Say how do you do to Mrs. So-and-so" and "Shake hands." Each child performed this function with docility and formality. Upon arriving at the last table, near the door, this performance

was repeated, with an elderly couple who were rather effusive. The six-year-old complied, but when the four-year-old was urged to "Shake hands with Auntie," he rebelled. It was too much. "Aw, to heck with it," he said, and rushed out of the door. A child should act according to its age, as should an adult.

Youth is a period of preparation. However important this period, it is not as important as the adult period. This may sound paradoxical from one who is urging the understanding of youth, but is consistent with the plan of training recommended below. Understand the child, but aim at maturity.

St. Augustine is said to have implied that if a child were given into his care for the first six years, an indelible stamp could be impressed. This is only a half-truth, as witness the Reformation. The next six years are just as important and impressionable under similar circumstances, and the next six and the next, and so on.

The elasticity and resilience of human reactions are amazing. The importance of the first six years is because this period is *first*, it is "primus," but not "prime."

No generation has passed without some oldster deploring the follies, callowness, irresponsibility, and *youthfulness* of youth. These indictments are usually made by one who looks back with regret at lost opportunities. Youth is a period for making mistakes. We learn by making mistakes, and the human being is more fortunate than lower animals in having the longest period in which to make mistakes with more or less impunity. Those whose rheumatism, hardening arteries, increased myopia, and faltering digestion distort their judgement should understand the importance of failure. How parents regard the failures of youth and the way in which they treat them is the significant factor in child-training, not the making of mistakes.

Nature is prolific and, from man's point of view, wasteful in its arrangements for the continuance of a species. Marine life is astounding in this respect. Millions of offspring are spawned from one parent. "Large tracts of water become changed in colour because they swarm with innumerable multitudes of tiny embryos"; and again, "To produce a large family, making little provision for it, is a wasteful and improvident method of maintaining the species" (*Mitchell*, page 122). But who *wants* to maintain the species?—and what species? This horde of offspring is mostly devoured by other species who would starve and hence disappear. It is only the human who thinks in terms of species and its preservation—and modern humans, at that. We consider it "wasteful" because we are thinking of the individual unit.

We are prone to think of the small families in human societies as being less "wasteful." The number of sperms which are provided for the fertilisation of one egg is just as wasteful. But the provision for the *survival* of the fertilised egg in mammals is extraordinary as compared with less "fortunate" species.

Survival is the significant factor. And so, as we follow along the evolutionary scale, up or down (depending upon whether you are a human or an amœba), one finds that the provision for after-birth care becomes more and more efficient. The African lung-fish youth is guarded by the male parent "savagely, biting at any one who tried to touch them" (*Mitchell*, page 137). A kangaroo carries her young safely in a pouch into which, in later youth, they may pop out of harm's way. Little ducklings ride about on the mother's back. The hen surrounds her chicks with broadspread wings, and so on.

During this period of care for survival the young "learn." The parent bird pushing the old fledgelings

from the nest and swooping beneath them to prevent their falling while they practise flying ; the mother cat switching her tail so that the kittens may learn to pounce ; the lioness followed by the cubs, who thereby learn to stalk, all these are instances of youth learning. It is a mistake to think of these situations as " educational." The mother animals are not teaching, but instinctively providing an opportunity for learning. (See below.) Undoubtedly the young learn because of the presence of the mother or father, but in most cases removal of the parents would not rob the young of opportunities for learning. The parental environment is convenient but not necessary for learning certain skills, however necessary is the mother for feeding, cleaning, warmth, etc.

Through such instinctive learning arrangements the lore of the species is passed on from generation to generation. Each member of a species in due course acquires the *complete* repertoire of the previous generation. To be sure, there are differences in degrees of skill, but not in kind of achievement. A lion may be faster, deadlier, or more vigorous than another, but the kind of behaviour is common to all. An environmental or biological change of sufficient magnitude might, according to one concept of evolution, result in a new but not a more efficient species.

Each individual of the species inherits a structure which is already organised at birth. The direction of the organisation is rigidly determined, and the organisation of the structure largely determines the function. Thus a bird possesses a structure of definite skeletal and muscular organisation which determines that this animal shall fly ; similarly the hen walks on two legs, the dog on four, the monkey climbs, the human walks erect.

Structure and function are closely allied. If an animal is born with a certain structural arrangement already

organised to function in a certain way, independently of the environmental influences, it is said to be endowed with an instinct. By instinct is meant an innate, unlearned pattern of behaviour, common to all members of a species, stable in its mechanism and efficient in its operation. An example is given by Mitchell: "Sooner or later, however, spiders have to disperse to avoid the reawakened instincts of their mother and the fierce attentions of their hungry brothers and sisters. Many of them do it by a curious device, making use of the wind like the winged or tufted seeds of plants. On a fair but windy morning they climb up to the highest point available, to the topmost bar of a fence, to the edge of a high wall, or to the extreme twigs of bushes. There they raise themselves on the ends of their legs with the abdomen held erect and pointed backwards away from the wind. Then little tufts of delicate silk are shed out from the spinnerets and float in the breeze until they are long enough and have enough surface to carry the spider from its support. The caprice of the breeze determines the course and distance of the flight, but just as a spider can haul in the thread which binds it to a spot from which it has dropped, so when it is floating it can roll up its sail, piece by piece, until it descends to the ground" (page 127). Now, the spider does not learn this pattern, nor can the spider alter it. Once the pattern begins to unfold, it must be completed.

The more complete the instinctive repertoire, the more efficient the organism, provided the environmental factors are propitious. Because the pattern is stable, any drastic change in the environment is likely to cause disaster to the individual. Many species in the past have been decimated because in them rigid efficiency took the place of elasticity.

The human child is born with relatively few instincts

(to be discussed later), but an enormous potentiality for adaptation to many wide changes in the environment, provided he is protected from drastic changes during his early childhood.

The prolongation of youth is a fortunate circumstance in man, because it permits a longer period for learning. (Not that learning is solely confined to the period of youth ; it extends throughout life.) The organism during infancy is still in a state of flux, capable of many adaptations. Changes in environment are hence less drastic. The individual learns to adapt to changes, sudden or gradual.

Primitive man, as far as we know, acted as the animals do. Probably tricks and skills were transferred in almost the same manner as from cats to kittens then and now. Man's period of youth was more prolonged than in animals and made for survival against what must have been terrific odds, but once the helplessness of early youth was past, it would not have been a serious matter to be cut off from other human society. But man's weapons of offence and defence were much less effective than those of his enemies, who were swifter in flight and attack and possessed larger and sharper teeth and stronger armour. Man, therefore, had to use his intellectual superiority for survival. Undoubtedly the invention of gesture and spoken language, and hence the more effective use of concerted effort, helped immeasurably in the fight for individual survival, which, of course, is necessary for species survival.

But at some time or other a human being invented writing—the most revolutionary behaviour pattern yet invented, because as soon as a permanent record of its activities could be kept by one generation, the next and subsequent generations could begin where the previous one had left off.

The same purpose may have been served by axes, pottery, and clothes. Whether these preceded writing or not is immaterial. They helped to form a *record* which could be preserved and reintegrated in human experience at some future time, and this is the important factor. The *time* taken in learning was thus telescoped. One can argue that a modern child, left alone, would invent writing when and if he found a need for it. Even so, this would entail an inordinate waste of time. Someone *deliberately* developed a technique affording a formal opportunity for the young to learn the record of the past.

The next step in human development was obvious. Someone had to translate the record of the past in such a form that it could be readily apprehended in the present. And so education had to be invented.

At first, the accumulation of human experience by successive generations was a slow and halting process, but the momentum increased with increasing acceleration. At one time it was possible, theoretically, for a single individual to encompass in his lifetime all human knowledge. Today that is impossible.

As soon as the accumulation reached a point at which the average man could not encompass the whole record, a process of selection must have appeared, hence curriculum building, so dear to the heart of the traditional educator. As soon as one selects, one implies "purpose." The tragic, or rather semi-tragic, results of this procedure will be discussed in Chapter XIV.

The point, to be stressed again at this juncture, is, that the human being is provided with a period of youth lasting roughly twenty years, during which he prepares himself for adult life. What have we been doing with these twenty years? What should we be doing with them?

Obviously the first question to settle is, what kind of adult do we want?—or rather, what is an adult supposed

to do? Most biologists and sociologists and some psychologists would answer, at once, adults are to bear and bring up their children and perpetuate the species. It must have occurred, even to primitive man, that this would be a futile sort of existence. Such an answer suggests the state of mind of the slightly befuddled person between two large mirrors almost parallel, or that of the slightly frustrated individual compelled to look at the picture of the boy looking at the picture of himself looking at a picture of himself looking at a picture of . . . and so on.

Of course, these two illustrations in no sense prove that the answer given above is not a "correct" answer. Such may be the "purpose" of existence. Reproduction and the preservation of the species *may* be the be-all and end-all of being—but, man has persistently refused to believe this, or, at least, some have done so. But, since the answer cannot be proven false or true, any answer will serve—as long as one believes it. This book is written on the assumption that there are other factors than mere genesis involved—in fact, that the "other" factors are more impelling.

What have we been doing with this youth period? From time to time in the history of the world, inspiring teachers have emerged and the selection of the curriculum has been changed according to the changing emphasis of the teachers. It is apparent that only by suggesting a *change* could a teacher become really inspiring, or at least attract sufficient attention to remain inspiring. Youth is always in the helpless situation of having to react to the present as arranged by its teachers, and so, for a time, youth follows one master. Youth is exposed to deism, theism, hedonism, agnosticism, Christianity, Buddhism, Mohammedanism, socialism, Marxism, fascism and democracy and other -isms; these may "take" or not—some-

times permanently. In the beginning, the child has little choice. Achieving maturity through his experience, he begins to ponder, wonder, and experiment, and, depending on his energy and intelligence and persistence, may become an inspired teacher himself, and then the cycle starts all over again.

Emphasis has always been placed on teaching children to learn to live in the kind of world that adults think the child *should* live in. Already the decrees have been formulated, the mould is ready to be locked. Divergence is abnormal, resistance is delinquency, and disagreement is heresy. "A classical education is the highest achievement of men," says one teacher. "A scientific education is the most useful," says the realist—for what? "My orthodoxy is the only path to fulfilment of my destiny," says man during his novitiate. "The democratic way of life is the only hope for the future," says the statesman: most of us hope so—and go on living.

Surely we should be looking for a method of education which takes for granted the right of a child, when mature, to choose for himself. If so, our education should be directed towards the development of independent judgement rather than uncritical acquiescence—but more of this later.

Let us now discuss the *importance* of youth. From time to time, and recently far more frequently, statisticians in every field have prophesied—that the sun is getting cooler, that the earth is going slower, that the universe is either expanding or contracting, that the race is growing taller, that insects will ultimately reign supreme, and so on.

In 1798 Malthus announced to an already bewildered world that the human race was multiplying so fast (geometrically) and the food was multiplying so much more slowly (arithmetically) that unless something was

done—it would be too bad. (He didn't say for whom, and some people undoubtedly said, "And a good thing, too"). But nothing was done about it specifically, except in France, where Napoleon did something, but not deliberately. The birth-rate in Europe and America didn't start to decline until about 1870, and now, again, "something has got to be done about it."

Apparently there is an "alarming" fall in birth-rates in some countries, especially Europe, Britain, and North America. Now, the question that occurs at once is, "Alarming, to whom?" Without going into this question too deeply, it will be obvious that most concern about the birth-rate is associated with national defence and offence. People are apprehensive lest a prolific neighbouring race attempts not only to conquer them, but to impose upon them a way of life which is abhorrent. But the alarm is a "national" alarm, and has not, as yet, affected those most concerned, namely parents, for families have been steadily decreasing in size.

TABLE I
POPULATION TREND IN GREAT BRITAIN

<i>Total</i>	<i>Total Population in millions</i>	<i>Per cent. of Total under 15</i>	<i>Per cent. of Total Men 15-64, Women 15-59 (both inclusive)</i>	<i>Per cent. of Total. Men 65 and over, Women 60 and over</i>
1901	37	33	61	6
1911	41	31	62	7
1921	43	28	64	8
1931	45	24	66	10
1941	47	21	67	12
1951	48	19	66	15
1961	47	18	65	17
1971	46	16	63	21

The Beveridge Report in Brief (1942, page 18) predicts from the "tendency" forecast in Table I, that there

will not be enough youth to take care of old age in 1971—unless “ something is done about it.”

The assumption is made that it is desirable “ to encourage large families ” (page 47). One can only conclude that the economist predicts that unless there are larger families the Beveridge Plan will be unworkable. But surely the main function of youth is not to grow up to keep the old in being !

Let us look at Table 1 again. It is obvious that the percentage of “ adults ” aged 15 to 65 remains fairly constant. This is the group which has to do the work for which the human race was destined. By definition the older have passed their usefulness and the younger are not yet ready to assume their burdens. If this adult percentage will remain constant, why all the alarm ?

However, this argument may be just as specious as others deduced from the same data, but no more so. Statistics are fascinating, especially when projected into the future. Someone said, some time ago, “ If all the statisticians were placed end to end—it would be a very good thing.” Be that as it may, the statisticians have at least directed our attention towards the importance of the “ few ” youth that are left to us.

We are at last beginning to realise that “ nature ” uses the period of youth to good advantage. We, the highest form of life, have neglected, nay, exploited this period. Whatever the purpose of living, the management of youth, in the past, has been unintelligent, if not worse.

It is not surprising that initial efforts should have been directed towards the *physical* care of children. Great strides have been made in the field of Public Health. The application of scientific principles necessarily lags behind the theories, but the inertia has been overcome and the movement is gathering momentum.

Gradually, slowly, but surely, the *mental* side of the

child's development is also being considered. C. Hartley Grattan (*Harper's Magazine*, 1943) says, "These [children] actually born will be socially very precious, . . . and hence it is desirable that the Government take a hand in ensuring that they get the best upbringing possible."

Here, then, is the challenge.¹ The youth are precious—not as workers, or soldiers, or water haulers, or wood hewers, or doctors, divines or dominies—but just precious. It only remains to decide what is the "best upbringing possible."

The following chapters attempt to answer this question, assuming that the meaning of youth is *preparation* and that the importance of youth is now obvious.

¹ Cf. *Our Towns, A Close-up* (Oxford University Press, 1943, page 111). "Only today, with a falling birth-rate, do we see how wasteful we have been of human life—body, mind, and spirit. If we believe in human dignity and human worth, we must take up the challenge of September 1939."

CHAPTER III

THE BEGINNINGS

EVERY living thing starts as a simple cell. This cell is composed of protoplasm—living substance. Protoplasm may be analysed by the chemist into several elements—carbon, hydrogen, nitrogen, etc. ; but we do not know why these elements, when combined as they are in protoplasm, should behave as they do. We explain this behaviour by saying “they are alive,” but we have *explained* nothing by saying that.

The amœba is a type of simple cell. It is among the simplest forms of living matter. It is a one-celled organism found in stagnant pools. It lives and breathes and eats and moves, and in time multiplies by simple division into two daughter cells (and in this fashion the amœbæ multiply).

All the more complicated organisms are made up of cells joined together. But as we follow the history of living organisms along the path of evolution, we find that as the organism becomes more complicated the cells, instead of being all alike, become differentiated and specialised. Muscle cells assume the function of moving the organism from place to place, gland cells secrete, nerve cells conduct, sense cells respond ; the only ones that remain undifferentiated are the cells which will produce the new organism, the sex cells. Thus functioning in a complicated organism like a human body is the co-ordinated action of millions of cells, each one acting in a manner determined by its specialised structure.

Higher types of living organism always begin with the fertilisation of a single cell, the egg, a female cell, by the sperm, a male cell. After fertilisation the egg begins to

divide somewhat like the amoeba, but instead of the daughter cells floating off by themselves, they remain in very close union. In the human being the division and multiplication go on inside the uterus of the mother. It is a continuous source of wonder to the biologist to observe this phenomenon and to contemplate the directive force of nature which controls the type of organism which emerges from the fertilisation of an egg—the fish egg into a fish, the bird egg into a bird, the horse egg into a horse, and the human egg into a human infant.

Secure for the first nine months, the human infant develops, nourished by the mother, and at the end of this period is ushered into the world with all the cells which it will possess during its lifetime.¹

Looking at the apparently helpless new-born infant, we notice that it can move its arms, legs, tongue, and eyelids, that it can breathe, sneeze, cough, that it can suckle and swallow and digest, that it can cry and apparently see, feel, and hear. All of these actions were nurtured and organised *in utero*. Compared with the young colt that staggers to its feet a short time after birth, compared with the butterfly that immediately wings its way into the sky, the new-born infant is indeed helpless.

Yet, compared with these, the potentialities of the infant are enormous. If we shine a light into a child's eye, the pupil will contract; if we put our finger into the palm of the child's hand, its fingers will close over it; if we tap a tendon just below the knee-cap, the foot will give a jerk: these are called reflexes. The reflexes are signs and symptoms of the accurate co-ordination that has taken place *in utero* of the bodily structure. If

¹ This is not strictly accurate, since cells die and are replaced, e.g. blood cells, but it is true of most of the cells that concern the psychologist, e.g. the nerve cells, the sense cells, etc.

they do not appear, we know at once that something has gone wrong.

The reflexes are simple actions. If we look more closely we find complicated action-patterns. For example, if a nipple is put into a child's mouth, the child will suckle; and if the milk strikes the back of its throat, the child will swallow, and after that other series of complicated events will take place: digestion in the stomach; contraction of the intestines; collection of waste and final elimination thereof. This series of activities is called an instinct. It differs from a reflex in that it is more complicated.

As mentioned previously, the instincts in man are not nearly as complicated as in the lower animals—for example, in the solitary wasp. A human infant is born with the minimum of instincts, which is very fortunate, because instincts are efficient but stable. The more instincts the less chance is there of changing the total pattern of life, and hence the fewer the number of instincts the more opportunity is there to learn.

A child is born with the capacity to use every structure for the purpose for which it was designed. The opportunity for combining the many possible ways in which the structures can be used is almost infinite. The child may be said to inherit his structure and its attendant function. He inherits legs and feet because he is human, rather than wings and feathers which he would inherit if he were a bird, but he must learn to walk as the bird must learn to fly. Legs and feet and feathers and wings are inherited, but the act of flying and walking is not inherited. The child also inherits blue eyes or brown eyes, long legs or short legs, straight or curly hair, and so on. Whether it later mascaras its eye-lashes, becomes a long-distance runner or a ballet dancer, or parts its hair on the right or the left side, is the result of learning

and is not inherited. A cow inherits the number of stomachs suitable to digesting grasses, a lion inherits teeth, stomach, and glands fitted to digest meat, a child inherits a stomach that later on can digest almost anything. It may be said that a lion inherits a taste for meat and a cow for clover, which is not quite the truth, but certainly the child does not inherit a taste for crumpets, banana-splits, or hot-dogs.

Children are obviously not identical. Size, length, colour, shape, and activity show a wide variation; even the five Dionne Quintuplets could very soon be distinguished one from another. We have reason to believe that these differences of form are accompanied by a difference in organisation. Activity of the sense organs in responding to environmental stimuli and actual appreciation of natural surroundings differ in children. For example, colour-blind people, as far as we know, actually see differently from those who are not colour blind. We know that the taste of certain substances is different to some children from what others experience; the same substance will be sweet to one and sour to another. The rate at which a nerve conducts an impulse differs in different children. The efficiency of the whole nervous apparatus varies: some children respond jerkily, others sluggishly. The muscles and their regulation differ in children: in some children the muscles are keyed up, in others they are placid. This characteristic of muscle state is called *tonus*. All of these differences may be due to peculiarities in the organisation of the structure of the cells. We are not sure, at present, as to the exact significance of these differences. We know, however, that one result of the difference in structure and function is that some children *learn* more quickly than others.

The capacity to learn is instinctive, innate, and more

or less unchangeable. This isn't strictly true, because certain factors such as disease and malnutrition can affect adversely the capacity to learn. We know of no device which will increase capacity in the child that is born a poor learner. (See Chapter IV.)

In addition to the activity of each of the specialised cells, muscles, glands, etc., the human infant, as a whole, acts consciously. Consciousness is instinctive, but where it comes from, how it acts, and what it is made of nobody knows. It invades all the functions of the body, but is known only to the individual himself. We can never share our consciousness with someone else. We cannot describe to a man, blind from birth, what a rose looks like, any more than we can describe to a man deaf from birth what a foghorn sounds like. We can describe to another seeing person what a rose looks like, but we can never actually know what the other person sees, or whether he sees as we do, even though the words we may use are the same as he would use to describe the same object. We do not know whether animals are conscious or not—we assume that they are because they act somewhat as we do ; as a matter of fact it is for the same reason that we suppose human beings (other than ourselves) are conscious.

It is because we are conscious that we can see, hear, and feel, that we can pay attention and be sad or joyful. We are born conscious, and therefore we can say that we inherit consciousness ; but since all the information which we gather as we go through life must depend on the action of the sense cells, by which we see, hear, taste, and feel, it will be readily understood that the child does not start out in the world with any background of conscious experience. Consciousness is like the jelly which is poured into an empty mould ; it sets and takes on the form of the mould. It is like water which runs in the

direction in which a pipe is laid. It is like a reflector, reflecting rays of light in the direction of its focus. It is like a paper on which the pen writes black figures on a white page. It is like a block of marble from which the sculptor chips, leaving the form he desires. It is like a photographic plate which, when developed, leaves the imprint of the light which fell upon it, and—it is like none of these things at all. Consciousness is a unique phenomenon ; each one of us has his own. But because of consciousness we have been able, as human beings, to develop from the helpless infants which we were at birth, through learning, to the complicated mechanism of adults. We have bridged streams, conquered the sea, the land and the air, we have survived most natural catastrophes, tamed the elements, invented language and printing, but we are still as far away from understanding the nature of consciousness as were the philosophers in early times. We know, however, that without consciousness there would be no learning.

Speculation upon the kind of consciousness which is present in a very young child is a fascinating undertaking, but fruitless. No one has yet discovered a method of studying this phenomenon directly. It is still impossible for one consciousness to know another consciousness. Indirectly we may draw conclusions, but the information so gleaned is bound to be coloured by the experience of the observer. When behaviour patterns are quite similar, such as those of a group of adults of the same age and background, it is justifiable to conclude that the processes that go on at a conscious level are also similar.

To read into animal consciousness a similarity to human conditions is to beg the whole question. We learn about the behaviour of other human beings, in the field of consciousness, largely through the means of communication which we call language. By the use of language one in-

dividual can at least describe his consciousness. Whether his description fits the facts or not is beside the point. As long as the description is understood by another and seems to "fit the facts," we conclude that experiences are similar, but we can never know if they are identical.

In studying a young child, language, as a medium of communication, is of course denied us. Another method, by which we attempt to investigate early consciousness, is the revival of early memories ; this plan also presents difficulties because of the phenomenon of forgetting. At present one looks with suspicion upon reports of instances of such early memories. It is questionable whether any authentic revival of conscious experiences earlier than those of the second year has ever been accomplished.

Our technique for studying and describing consciousness, therefore, is largely speculative and inductive. We can postulate certain characteristics of consciousness. For example, it is not unwarrantable to suggest that consciousness is present in the new-born, that conscious experience has begun at birth, if not earlier. In the visual field it is suggested that a child first experiencing vision not only sees, but that the visual field is divided into at least two parts, a focus and a background. There is an immediate experience of *difference* ; unless one postulates this, it would be difficult to explain how awareness of difference could occur. This function of consciousness makes it possible for the child, later on, to classify his experiences. Undoubtedly the phenomenon of attention is concerned with this process and may be, in itself, the form which we are discussing. At any rate, we must assume that this is an unlearned attribute of consciousness. The only justification which we have for this assumption is : (a) how could the newly conscious organism possibly *learn* this phenomenon ?, and (b) differences, as experiences, are earlier in appear-

ance than similarities. This is understandable, because in the initial stages of experience it is more important for the organism to distinguish differences than it is to classify similarities. The classification of experiences is a later development and may be thought of as a special case of the awareness of difference. Classification is a higher form of mental activity than the immediate response to differences. In the intelligence tests which will be discussed later, a child of three can tell the difference between objects, but only at five can he discuss and interpret similarities.

It is not necessary, in the light of our meagre knowledge of early consciousness, to postulate an unconscious. In fact, in the scheme outlined in this book, that term is not used. It is claimed that the scheme of human development described herein takes into account the demonstrable facts of human behaviour without needing to use the "unconscious" as an explanatory principle. On the principle of "economy," which applies to all scientific disciplines, one should aim at simplicity of hypothesis.

It is postulated that, although consciousness has form, it has no substance. In other words, the child's initial consciousness is without content. The child does not, and what is more cannot, inherit conscious experience. There is no racial consciousness. This statement is at variance with some by other students in this field, but the reason for making it is that the known facts of child development do not, at present, warrant postulation of an inherited content. This, however, does not overlook the possibility that, with increase in knowledge of child study, a decisive demonstration may be made upon this subject at some future time.

Consciousness, as such, does not do anything. It is not a dynamic concept. If this interpretation is of value, it can be readily understood why the writer discards the

concept of the unconscious as a dynamic principle. If consciousness cannot do anything, certainly an unconsciousness would also be impotent.

Thus the human child inherits very little : the minimum number of organised patterns necessary to maintain life, providing he is well looked after ; and consciousness, in which he builds, by learning, the edifice of his experience. The degree to which he does this building, whether quickly or slowly, massively or flimsily, is dependent upon factors which undoubtedly he inherits, and which remain as the substratum of the later additions. But whether he behaves courageously or cowardly, courteously or unmannerly, frugally or extravagantly, loyally or treacherously, is dependent upon the manner in which experience moulds his developing character. In other words, character is acquired. What a man *is*, after he grows up, is never the result wholly of heredity or environment, but rather of the interaction of the two. One can never leave one's heredity behind, one can never remain unaffected by one's environment. In so far as the hereditary equipment of a human being is so meagre, it is obvious that the environmental influences are exceedingly important. In so far as heredity, over which we have no influence whatever, is stamped upon us at birth, it is apparent that the individual reaches whatever heights or depths the future holds through the environmental factors.

As teachers we try to influence those whom we teach. We can do this only by arranging what we consider to be an opportune environment, in which the child, responding as he must do, will learn what we consider essential. It is important that we study how people *learn*, because it is only by knowing more about learning that we can direct adequately and efficiently the lives of those for whom we are responsible.

CHAPTER IV

MATURATION, LEARNING, INTELLIGENCE, • CAPACITY

THE most obvious change that takes place in a child during the first months after birth is the increase in size and weight. The average child weighs, at birth, between six and seven pounds. After losing four or five ounces in the first three or four days, the normal child adds weight and height (length) gradually or fitfully over the next twenty-odd years. This increase in weight, however, is not like putting beans in a bag or blowing up a balloon ; not only is there a change in size, there is also a change in shape and in the relative proportions of parts of the body. If we were to magnify a small child to the size of an adult, he would have an enormously big head, a long, shapeless torso, and very small, podgy legs and arms. If we could look inside him, we would find some of the organs relatively large (e.g. the liver), but, of course, smaller than in the adult. But we would find some organs in the child which do not appear in the adult at all, such as the thymus gland, which disappears in the first year of life. Growth proceeds gradually on the whole, but with some spurts, more rapidly at first, then slowing down, with a second spurt in the second decade of life. Often a child, after being confined to bed for a protracted period, is startled to find that the sleeves of his coat are too short and that his shoes are decidedly tight. Those who see a child at longer intervals may exclaim at the rapidity of its growth ; to the mother and father the child is the same size in the morning as when they put him to bed the night before, and at times it is difficult for the parents to realise that the child is growing up. It is more difficult for them to appreciate his mental growth.

Optimum conditions must prevail if growth is to proceed normally. Sleep is as essential to growth as food. Disease, poor food, lack of sunlight, lack of fresh air, fatigue, and lack of rest—all these impede growth.

Growth in volume is more than a simple addition of mass. Structures grow at different rates and at different times. The child needs varied food substances: blood-building foods, liver; bone-building foods, eggs; muscle-building food, meat; a constant supply of fluid which, altered in form, bathes all living cells; special growth-inducing and disease-resisting foods, oranges and apples, butter and tomatoes; and energy-foods, potatoes, bread, and sugar.

Side by side with the increase in weight and size, another change takes place, called maturation. Maturation may be defined as the process of innate regulation and co-ordination of all parts of the body. It is determined by the hereditary pattern of the organism. Growth and maturation have proceeded a long way before the child is born.

One of the early signs of maturation in a child is the eruption of the teeth. They appear first, in the lower jaw in front, at about six months of age, and the others more or less regularly from then on. Of course, the beginnings of the teeth were embedded in the jaw before the birth of the child; X-rays show their presence in position, prior to eruption. The age at which teeth appear varies among children. Through some abnormality in maturation, some children may have only one set of teeth instead of two, as is usual. Nutrition is a very important factor in determining the age of appearance of the teeth and their condition. Nature provides for the appearance of these useful tools at a time when the addition of solid food to the diet becomes necessary

for adequate nutrition. With the aid of the first teeth the child can begin to nibble at more solid food.

Soon the bone structure, which, in the beginning, is very soft, becomes more rigid, due to the deposit of calcium and other hardening substances. The normal child, by exercising his muscles, which at first are rather sluggish in their activity, uses the bones as levers. He learns to straighten his back and hold up his head, after which he sits up and looks at the world from a perpendicular position. Later, the bones become even more rigid, the muscles stronger, and the child, having learned to hold his hips (the pelvis bone) steady, stands and, moving his legs in alternate rhythm, walks.

At birth the bones of the skull are not united, but are like an ill-fitting jig-saw puzzle. At the top of the head there is a soft spot called the "fontanelle," where the bones are not yet united. Gradually, as the bones become harder, this hole fills up and by the time the child is a year or two old the skull is completely united and the size and shape of the head fairly well determined for the rest of his life.

Later, at the beginning of what is called puberty, another period of more rapid change takes place. These changes are different in boys and girls. Hair begins to grow on the boy around the pubis, the axillæ, and on the face and other parts of the body, the organs of reproduction enlarge, the sperms begin to grow and mature and other secretions are manufactured in the reproductive glands peculiar to the male sex. The body takes on an adult form, muscles become more or less prominent, the shoulders grow broader, the hips more slender. In girls also there is a growth of hair, usually confined to the pubis and the axillæ, the eggs mature in the ovaries, and the onset of puberty is indicated by periodic changes in the uterus called menstruation. The

body takes on a female shape, an enlargement of the mammary glands, a broader pelvis, and the graceful curves of the feminine body due to deposits of superficial fat, usually absent in the male. There are other indications of maturity which occur later in life, but these need not concern us here as we are interested primarily in childhood.

In some children, maturation stages may occur earlier or later and proceed faster or slower, or may be omitted altogether. It is important to remember that maturation goes on without any conscious activity on the part of the individual ; it is part and parcel of the biological history of the race.

We have been discussing the physical maturation of the growing child. There are similar changes in mental development which are more difficult to distinguish and recognise. The muscular activities of a very young infant are seldom precise, the reflexes are not as brisk or rapid as in older children. Independently of training or teaching, certain patterns of behaviour appear more or less at fixed ages in all children. Such patterns are called either reflexes or instincts, according to their complexity. The pupillary response to light is a reflex ; the suckling, swallowing, digesting response series is called an instinct. An instinct is an innate, unlearned, complex, efficient series of behaviour units organised according to the inherited structure of the individual. The human being inherits relatively few instincts as compared with the lower animals. In this book an instinct is considered a "pattern," not a "purposive" mechanism.¹ For

¹ Cf. T. H. Pear, "Are There Human Instincts?" (*Bulletin of the John Rylands Library, Manchester*, Vol. 27, No. 1, December 1942). An interesting and clear presentation of the thesis is expressed on page 167: "I think that the problem of human 'instincts' is partly verbal." The ambiguity, in part, has been due to the use of the term instinct to describe many phenomena, especially "purposive and energising" mechanisms. Many authors used the concept of instinct

example, very young children cannot consciously control the emptying of the bladder ; training at this age cannot speed up this control, but at about thirteen to fifteen months it becomes relatively easy to teach a child to control the muscles involved in this activity during his waking hours. Maturation has undoubtedly preceded the learning of this habit. Whether the child cannot pay attention, or whether the nerve paths are not joined up to the muscles, or whether the experience of the child is too limited, need not concern us now. Apparently there is a stage of mental maturity at which optimum conditions obtain for teaching a child certain habits. The parent should be alert to recognise the periods of maturity, so that she will not waste time and energy trying to teach a child before he is sufficiently mature to learn.

There seems to be a close relationship between physical and mental maturity. At present, information about the influence of one upon the other is meagre. There are often discrepancies between the physical and mental maturation of a child to a remarkable degree. A child may mature perfectly as far as his body is concerned and remain very backward mentally. The reverse is not so common, although instances are known, e.g. dwarfs.

Physical development is easier to ensure than mental. More is known about the influential factors in physical development, such as diet, fresh air, exercise, etc. We are only beginning to learn about the factors which influence mental development and are still

to *explain* human behaviour. Pear has shown the inadequacies of such explanations. "Instinct," however, is a useful word and need not be discarded, as indicated in the text above, provided that the meaning is clear and unambiguous. By restricting the meaning to a "pattern" of behaviour, the whole field of motivation is cleared for more precise investigation. Pear's statement on page 161 corresponds with the principles enunciated in this book. "Somehow, in the process of maturing, the manifold potentialities and dispositions of childhood coalesce into sharper, more distinctive motivational systems."

groping about for definite standards. Today, a parent may be told how to avoid the possibility of her child contracting tuberculosis: eliminate overcrowding, arrange for adequate diet, sufficient rest, sunlight and fresh air, periodic physical examinations. But as yet we can offer no *simple* rules which, if followed, will help the parent to shield the child from a "mental breakdown." The time may be close at hand when such rules will be formulated more accurately.

Mental development, as opposed to mental maturity, can take place only through *learning*. The individual changes by virtue of his experiences. Learning can take place only when there is some interaction between the organism and the environment. The *process* of learning is instinctive; the product of learning, *what* the individual learns, the change in his behaviour, is obviously acquired.

Learning, being a vital process, cannot be directly observed. It is a function of living. Although the individual is never aware of his learning, he must be conscious in order to learn. There is no unconscious learning.

The results of learning may be observed, described, and measured. The result of learning is manifested in the *changed* behaviour. A child who at first cannot walk, in the course of time learns to walk. Walking is a new form of behaviour, an ability which the child has acquired. (How much was contributed by maturity to this activity is difficult to estimate, but without learning no child could walk. No child without practice suddenly stands and walks.) The accuracy, speed, and efficiency of the walking may be measured and evaluated, e.g. in terms of speed, steadiness, length of pace, etc.

The analysis of learning is as fundamental to the psychologist as the study of energy is to the physicist. There are as many theories of learning, in psychology, as

there were theories of energy among the earlier physicists. Many suggestions have been put forth to explain, or rather to describe, how an organism can so change, under the influence of environmental influences, as to behave quite differently today from its behaviour of yesterday. The child falls clumsily when he first attempts to skate ; in a few weeks he slides along confidently. The "beginner " flounders apprehensively in the water, attempting to swim, pathetically trusting his life-belt ; in a few months he strikes confidently through the water. The young scholar is, at first, ignorant of Latin, but in two or three years he scans, translates, and even composes Latin verse. Something has happened within the organism.

Too great emphasis has been placed upon the contribution to learning of the brain, the cortex, the synapse (the junction between two nerve fibres or neurones). The change that takes place is not confined to the nervous system or even to one part of it, but permeates the whole of the organism—muscles, glands, nerves, sense organs, every cell contributes to learning.

It is tempting to think of learning as the making of a path through a jungle. The first attempt is difficult, but upon each successive trip a branch is broken off here, a boulder removed there, a tussock levelled or a deviation eliminated until the path can be travelled without hindrance or difficulty. Such a process is much simpler than the phenomenon of learning. But such comparisons have influenced many suggestions about the mechanism of learning, e.g. the "laws " of recency, frequency, and intensity. It is argued that the most recent path (i.e. through the nervous system), the one most frequently used, and the one most vividly marked would obviously be preferred and, as described above, would be more or less permanent ; hence the development of *habits* ! The only objection to this " explanation " is that it does not

conform to facts. Experimental data show that these three factors, recency, frequency, and intensity, are often ineffective. Furthermore, if this were a true description of learning, individuals would act as mechanical automata and *should be far more efficient than they are!*

Other students of psychology describe learning under such headings as Law of Effect, Law of Satisfaction, Law of Exercise. Again the facts belie the "laws."

Undoubtedly such factors as these operate in learning, but only to the degree to which they affect the *efficiency* of learning. An act repeated twice is usually more firmly fixed than if repeated only once. An "intense" experience is more effective than a vague one. None of these factors answers satisfactorily the questions which arise when discussing learning.

(1) How does the individual *begin* to learn?

(2) What are the factors which *terminate* a specific learning process?

The fundamental characteristic of learning is its *selectivity*. Certain patterns of behaviour, initiated by the individual during learning, are fixed and others eliminated. While learning to swim, a beginner thrashes around in every direction, expending far more energy and using more muscles than are required to swim efficiently. Having learned, his behaviour becomes stereotyped and automatic and the energy used is far less than formerly. Obviously some action-patterns have dropped out and others have become fixed. How?

This question would be readily answered if it were always the most efficient acts that are fixed and if the impeding actions were all left behind. But such is not the case. If only it *were* true that "successful" acts are fixed and "unsuccessful" ones eliminated!

Observation of a "learning situation" reveals the following data:

(1) The learner appears to be under the influence of some drive, urge, necessity, or of something akin to these.

(2) His actions are selected from his past learned actions and his innate mechanisms, because that is the only reservoir from which he *can* select.

(3) He persists as long as the "drive" continues. In terms of a "goal," he either attains it—or not.

(4) In the course of persistent efforts his behaviour changes and becomes more efficient in terms of expenditure of energy and in economy of structures used. (Cf. a child learning to thread a needle and the skilled non-chalance of the mother. In the child, tongue, cheeks, shoulders, arms, hands, fingers—all are tense. In the mother a quick glance, a flick of a finger, and it is done.)

These four statements must be examined more fully.

Learning can be understood only if it is considered as a purposive gesture on the part of the individual. Motivation is the prime essential for learning. Without it, action would not take place at all. Awareness of the drive need not be clear, but consciousness of *a* drive is essential. The individual must know that he lacks something and wants it. Under the influence of this motive the selection of past patterns begins *after* he has begun his attempts to satisfy the motive. Judgement is necessary. A conscious evaluation of each attempt, in the light of his own past experience, is made. The individual experiments to see if one pattern or another will work. His judgement may be faulty, in which case the act does not satisfy the motive and is discarded *for the moment* but not necessarily permanently; he may return to it again. He persists in this selective process *not* until he satisfies the initial goal, but rather as long as the goal remains unchanged; at any point in the process he may decide that he no longer wants what he started out after,

e.g. a child attempting to extricate a tricycle from a hole in the pavement may "give up."

After repeated attempts under similar conditions of motivation the individual chooses similar patterns until, through increasing familiarity, he crystallises a pattern to that degree of efficiency which satisfies him, e.g. he learns to run, a quite different pattern from walking. He runs at a certain speed and is satisfied. Someone offers a prize (a reprehensible incentive! See Chapter VI), and now the motivation is changed from "I want to run" to "I want to run *faster than someone else*."

In this description emphasis has been placed upon the active *conscious* participation of the individual. Because "evaluation," "judgement," "satisfaction," are conscious patterns which depend upon past experiences, the efficiency of the learning shows marked individual differences. Thus, learning can never be mechanical because these patterns never can be accurately gauged or controlled by the individual.

The change which takes place within the organism, in the nerves, muscles, etc., is not known nor does the explanation given above elucidate it any further, but the emphasis has been placed upon the conscious rather than the mechanical factors involved.

Whether an act, simple or complicated, is facilitated or inhibited depends upon the conscious consequences of the act; not only the sensory consequences (as in putting one's hand into a candle flame), but the judgement of consequences as evaluated by the individual in terms of whether the act appears to bring the goal nearer or not. There is always a future reference in learning. The past provides the means, the future reference determines the end. The efficiency of the judgemental consequences depends upon past experience and maturity. The young child can project his goal into the immediate future, later

he anticipates "tomorrow," and when adult may consider eternity.

How the judgement of an individual can help to bring about the biological changes that go on inside the organism, while a series of patterns are becoming automatic and result in the acquisition of a habit, the writer knows no more than anyone else. However, the significant factor of a learning programme which brings about these changes is not a mechanical device such as frequency, recency, effect, etc., but rather the effect upon an individual's whole bodily activity of the conscious evaluation of his own efforts. This factor is affected by all the inaccuracies, mistakes, disappointments, and satisfactions in the past experience of the individual. In this way the irregularities of the learning curve, the differences in the speed of learning by the same individual on different occasions, the effect of age and maturity, and the striking variety of individual differences are far more satisfactorily explained.

Learning, then, is a complex process. At least three factors are involved—motivation, capacity, and persistence. A formula may be written :

$$\text{Learning} \begin{cases} \text{Motivation} \\ \text{Capacity} \\ \text{Persistence} \end{cases} \begin{matrix} \text{is represented by} \\ = \\ \end{matrix} \backslash \text{Achievement} / = \text{Ability}$$

In the formula above, only "ability"¹ may be measured, and never wholly nor completely. When an object is measured, only one aspect of the object is considered, e.g. to measure the length of a table we select one aspect, the distance along its longest side. How can one measure a table *in toto*? The equation :

$$\text{Learning} = \text{the Measure of Ability}$$

¹ Achievement and ability are synonyms. A person "achieves" through effort and acquires ability. His total ability is made up of a number of skills. A skill is a unit-ability.

is not accurate. If it is written :

Learning = the Measure of Ability + whatever has
been omitted in the measurement,

it is accurate, but clumsy. Thus, if the child has a vocabulary of 100 words, we cannot say that the 100 words represent *all* that the child has learned in connection with this skill. However, with this caution in mind we may assume that the measurement of an ability is a rough measure of the learning. We assume that achievement (ability) *varies* directly with learning. The equal sign may be misleading.

Learning is modified by three variables—motivation, (M), capacity (C), and persistence (P). Thus, observing the caution mentioned above, the equation may be written :

$$\text{Ability} = A = M + C + P.$$

For the sake of simplicity, we add the three variables together and give them equal weight. This equation may be written out : learning is an innate function of living organisms manifested by a change in behaviour and controlled by the motivation, capacity, and persistence of the individual.

In answering the four questions posed above :

(1) The child begins to learn when he wants something and attempts to get it.

(2) He continues to strive for his goal until he achieves it or is diverted by another.

(3) The ultimate skill is partly determined by the effort expended and the number of times the pattern is used.

(4) The automatising of the pattern, i.e. the formation of a habit, depends upon the conscious discarding

and retaining of the patterns employed. The judgement of the individual is the important factor in determining the ultimate design.

(5) The efficiency of the learning is partly dependent upon an innate capacity which is a function of the living organism. The more efficient the learning, the more intelligent is the behaviour in the organism-environment adjustment.

What is the relation between ability and intelligence? If A represents $2x$ number of skills and A' (the ability of another child) represents x skills, is child A more intelligent than child A'? Is a girl who has learned to ride a bicycle more intelligent than one who has not? The second girl may never have seen a bicycle nor had an opportunity to learn, but the fact remains that the first girl has *ability* which the latter does not possess. Is ability a measure of intelligence? Ability may be measured, more or less accurately. If the number of skills representing various abilities is not a measure of intelligence, then ability and intelligence cannot be synonymous.

Intelligence obviously connotes more than achievement or abilities, alone. Let us define intelligence as the "fundamental capacity" of an individual. Then, let

$$\begin{aligned} A &= M + C + P \\ A' &= M' + C' + P'. \end{aligned}$$

Here are two formulæ representing two children of the same age. We may measure A and A'; let us assume they are equal; $A = A'$. Suppose we assume $M = M'$ and $P = P'$, then C would equal C' and ability and capacity would be positively correlated. But M may not equal M' nor C equal C', nor P equal P', because these three variables vary independently of each other. How do we know that $M = M'$ or $P = P'$? There is

no device available for measuring motivation nor persistence. Hence, by measuring achievement we can never isolate C. And so, if we define intelligence as capacity, we cannot measure either.

There is a way out of this dilemma. Assuming that the fundamental motives of young children have much in common and that the opportunities for practice are equal, then, if we measured a sufficiently large sample of children we could disregard differences in degree of motivation and persistence. The differences in ability could then be assumed to be a measure of capacity, which we could then equate with "intelligence." As a matter of fact, human society has adopted this plan long ago. People say, "So-and-so is brilliant." "Why?" "Look at what he has done!" Darwin learned slowly at school, but his later abilities place him high in the scale of intelligence. We rate our friends, and enemies, as brighter or duller than ourselves, in terms of comparative performances.

Binet and Simon were the first to standardise a test to measure "intelligence." It is unfortunate that it was called an "intelligence" test, since it is actually an "ability" test. However, in its later refinements, it became a very useful tool in the hands of a skilled operator. It is only a tool, just as a stethoscope is a tool used by a physician. The test itself is easy to administer, just as anyone can listen through a stethoscope. Interpretation of the test results requires long experience to be of any value, just as a physician can interpret the sounds he hears through the stethoscope only after long experience.

The value of the test result lies in its predictive accuracy. Given under proper safeguards, the test result affords a sound basis for prediction. In other words, if at five years of age a child has acquired the standard of ability

of the average five-year-old, similar circumstances of motivation and persistence at a later date will permit him to achieve a similar status relative to that of his fellows of the same age. This assumption is useful. Sufficient data have been gathered to show that a skilled person can predict from the test results of a five-year-old child his future academic achievement with a high degree of accuracy. The "intelligence test" has proved a valuable aid to education. No modern educational institution can afford to neglect this aid to child understanding. Parents should obtain a measure of the intelligence of their children during the first five years of age.

Criticism of the use of intelligence tests is usually made by those who are ignorant of their contribution to child training. The unreasonable pretensions commonly ascribed to the test have usually been made by those who understand it least and have never used it.

To sum up, the child starts out with relatively few innate patterns but an enormous potentiality for acquiring patterns of behaviour through learning. Learning is controlled by motivation, persistence, and capacity. Capacity is innate and unmeasurable. Achievement, the result of learning, is measurable. Achievement or ability is dependent upon the motivation and persistence of the individual through which the capacity is exploited.

Since capacity is innate, it remains constant throughout life (it may be diminished by disease, etc., but never increased); but the other two factors, motivation and persistence, are modified by experience. Parents and teachers should be especially interested in these two factors, since it is through these that learning may be directed. A child is born with a certain capacity; what he does with it depends upon how he is trained.

Capacity is a general potentiality. There are no

specific capacities. A child is not born a musician, teacher, leader, surgeon, or orator. His innate capacity may be directed into any channel by the development of interest. A child with a high capacity (usually indicated by a high score on the intelligence test) may, as he grows up, excel in *any* skill which he chooses to exercise.¹ Darwin might have become an outstanding surgeon, Faraday a skilled musician, Pitt a brilliant barrister, Caruso a highly successful financier, but each chose to develop skills in other directions. The commonly accepted opinion of special capacities is contrary to the above, because only recently have young children been studied. It is easy to appraise adults who have already canalised their capacities and to assume that the skill which they show is the result of a special inborn talent, but the accumulation of data on young children does not bear out this assumption. A child is born with a capacity, high or low or intermediate ; what he does with it depends on his motivation and persistence. A plan to assist the child in developing his capacity may be called "discipline," which is discussed in the next chapter.

The activities listed in Table 2 may usually be observed in the average child at the age indicated in the second column. The reader should keep in mind the many individual variations that appear in children. The absence of *one* activity in a child at the designated age does not, in itself, indicate retardation, though the late appearance of many of these behaviour patterns *may* be significant. Early appearance of an activity does not necessarily indicate precocity.

Plan 1, presented on page 54, is intended to aid the reader through the following chapters. As indicated,

¹ Witness the relatively short time in which a civilian army has been organised, in the democratic countries, into an efficient fighting force.

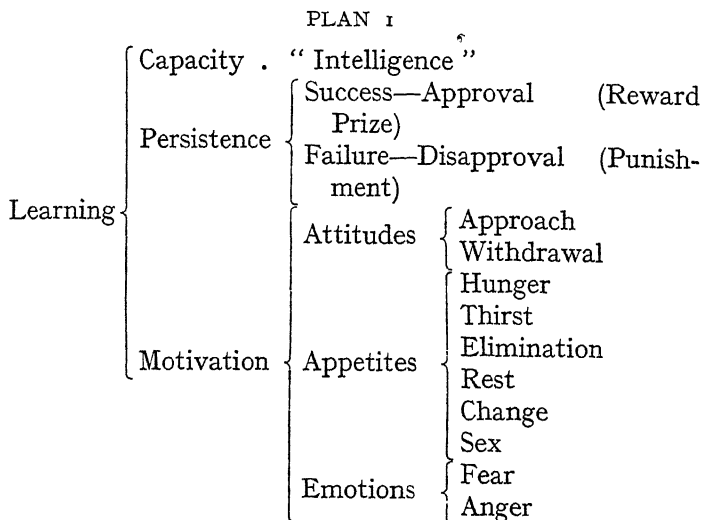
TABLE 2

ABRIDGED LIST OF ACTIVITIES OF CHILDREN FROM 0 TO 2 YEARS
AND THE AVERAGE AGE OF APPEARANCE¹

<i>Activity</i>	<i>Age of Appearance</i>
Shows general activity, increasing before feeding-time	At birth
Kicks	A few hours after birth
Turns over	Seven days on
Makes crawling movements when laid prone on flat surface	One month
Follows moving person with the eyes	" "
Hears sounds	" "
Brings hands to mouth frequently	Two months
Reaches for objects	" "
Smiles	" "
Holds head erect and steady when held to shoulder	Three months
Cries when adult leaves him	" "
Recognises mother and father	" "
Brings object to mouth	Four months
Laughs aloud	" "
Holds bottle	Five months
Grasps a seen object, such as a red ring	Six months
Holds out arms to be taken up	" "
Uses several syllables	" "
Sits alone one minute	Seven months
Raises self to sitting position	Eight months
Holds cup	Nine months
Creeps when prone	" "
Says da-da, ma-ma	" "
Stands holding on to furniture	Ten months
Opposes toy being taken away	" "
Puts aside toys to turn to another child	Eleven months
Stands, supporting self	Twelve months
Walks with help	" "
Walks alone	Fourteen " and fifteen months
Scribbles spontaneously and vigorously	Eighteen months
Climbs three steps	" "
Throws ball	Twenty-one months
Walks backward	Twenty-two months
Obeys simple commands	" "
Stands on one foot	Twenty-three months
Runs	Twenty-four months
Names part of face	" " "
Recognises self in mirror	" " "

¹ Selected from a more complete list given in *An Introduction to Child Study*, by Ruth Strang (Macmillan Co., 1938), pages 86-90. This book should be read by all Nursery School teachers.

learning is the basic process, dependent upon capacity, persistence, and motivation.



CHAPTER V

DISCIPLINE

DISCIPLINE is a *plan* of training, not, as is usually supposed, a system of chastisement. One does not "discipline" children, but rather, children should learn to live under a plan of discipline. A plan of discipline does not make learning easier or less arduous, but it may speed up learning and make it more pleasant.

From the discussion in the previous chapter, one may conclude that there are certain arbitrary and artificial rules of conduct to which the child must learn to conform if he wishes to feel comfortable in the community in which he is to live.

An effective plan of discipline must induce the child not only to respect the rules, but also to *want* to conform within the approved limits; but such a plan must, in addition, provide an opportunity for non-conformity, also within approved limits. Any plan which succeeds in obtaining blind obedience to its rules might be satisfactory and convenient to the director (a dictator), but such a plan would develop an unhealthy resentment in the "obeyor," leading ultimately to rebellion. A plan of discipline should be designed to train a member of the community to be willing to abide by the rules and regulations, but not necessarily without question. If any member feels that the rules are unjust or unwise, he should be able to propose changing or abolishing them. It is obvious, then, that each community must provide an opportunity to its members to alter the rules or laws to fit changing conditions and ideas.¹

¹ Cf. Thomas Paine, *Rights of Man* (1791, page 4, Thinker's Library Edition): "Every age and generation must be as free to act for itself in all cases as the ages and generations which preceded it."

The description of the process of learning given in Chapter IV provides a basis for constructing a plan of discipline. A typical learning situation takes place when a child is learning to use a spoon with which to feed himself. First we must assume that the child *wants* to feed ; the motive of hunger is operative. He has already learned certain patterns prior to this attempt : for example, he has learned to grasp the spoon, to reach his mouth, to touch the porridge in the bowl, etc. He has to combine all these experiences, rearrange them, and add others to evolve a new pattern. He can at first use only those patterns which he has already learned and dormant patterns he has inherited. In the course of his trials or attempts new arrangements of pattern will be brought into play, some of them successful and some of them failures. If he does not accurately strike his mouth with the spoon he may hit himself in the eye, and if the porridge spills out on the way the spoon arrives at his mouth empty ; if the spoon is accurately guided to his mouth, he will swallow the portion of food it contains and will derive some satisfaction therefrom. The satisfaction derived from sensory gratification is enhanced by the experience of effort. In the course of many attempts the pattern becomes more and more accurate and the child is said to become more and more skilful. Most of the unsuccessful patterns are gradually eliminated. The successful pattern becomes more simplified and stereotyped until, after a good deal of practice, the child is said to have acquired a "habit." His performance has been "streamlined." The degree of skill which he attains depends largely on the motivating factors.

As stated above, the actual mechanism by which some patterns are discarded and other patterns are fixed is not known. The psychologist has not yet devised a scheme for direct observation of the "learning." It is important,

however, to emphasise that the "fixing" and the "discarding" are both active phenomena. The discarding is not just a "leaving behind" of the useless acts. The selective mechanism discards as well as fixes. Usually one thinks of learning as only a fixing of the "right" patterns. Towards the selection of the final total pattern the discarding is, if anything, far more important than the fixing. The ultimate skill depends on the extent to which the discarding has been accomplished. The cause of most mediocre performances in the world is that too few patterns have been discarded by the individual.

Although we cannot observe the learning, we can study the factors which influence learning. These factors may be manipulated so that the learner will learn the acceptable modes of behaviour more readily than the others. The teacher "loads the dice." (The standards of behaviour of the teacher were, of course, influenced by the factors operating when she learned : see below.)

Every act which the child performs is followed by a *consequence*. If he hits himself in the eye with the spoon, he experiences discomfort ; if he fails to bring the spoon and mouth into apposition, he will feel frustrated ; if he does guide the spoon into his mouth, he will enjoy the resulting satisfaction. Such are the consequences of his acts.

If we study the manner in which consequences operate, we discover that the *nature* of the consequences retards or facilitates learning. Let us observe a child reacting to a candle-flame. He reaches for the flame. (He is "attracted" by the brightness.) He has already learned to reach for objects in the environment ("eye-hand co-ordination"). He is burned if his hand touches the flame. He feels the pain (sensory consequences), and his hand is withdrawn immediately (reflex). He may try again (depending upon the strength of the motive), with

the same result. By chance, after a number of trials, he touches the candle itself and finds he can hold that without being burned and still enjoy the proximity of the brightness. The nature of the consequences of learning to reach for a candle may be analysed into four characteristics : (1) immediacy, (2) inevitability, (3) invariability, and (4) adequacy. In other words, the hand is *immediately* burned ; it is *always* burned ; it is always *burned* ; it is burned to a degree nicely determined by the length of time that the hand is left in the flame. These four characteristics may be summed up under one heading—*consistency*. It is remarkable how quickly the average child learns how to avoid the flame because of the consistency of the consequences. (He does not necessarily learn to avoid the proximity of the flame. That is another learning problem.) The *first* rule for the effective administration of a plan of discipline is—the consequences of an act must be consistent.

The child learns to adjust to his physical environment first. The consequences of his acts, during such learning, are consistent : if he falls from a chair, he will immediately fall, inevitably fall, invariably hit the bottom and with a force precisely adjusted to the distance through which he falls. If he walks in the rain or falls into a brook, he will immediately be wet, he cannot escape wetting, it will always be a wetting (not burning or scolding), and the degree of wetness will depend largely upon how long he is out in the rain or how much of him falls into the brook. Such consequences, of course, do not ensure that the child will never go near a flame, nor fall from a chair, nor jump into a brook. But the consistency of the consequences makes learning more effective. He may choose to touch the flame, jump from the chair, or plunge into the brook. He can readily anticipate the consequences because of the consistency. If, on an occasion, he were to jump

from a chair and fall *upwards* or be gently wafted to the ground by unseen hands, or if in the brook he found the water perfectly dry, his adjustment to such situations would be adversely affected.

Turning from the physical world to the social world, to which the child must also adjust himself, let us examine the learning conditions. Whereas in the physical world a child's goals are usually fairly specific, in the social world the goals, often determined arbitrarily by the adult, are vague and even meaningless to the child. He must learn not only how to do something, but what to do it for. Often the latter aspect of the situation is not presented to him. Let us give an example. At meal-times we expect the child to eat what is placed before him. Hunger is the motive. He has two choices of behaviour, (*a*) to eat and (*b*) not to eat. If he *eats*, he will be immediately, inevitably, invariably, and adequately satisfied according to how much he eats. If, on the other hand, he does not eat, the consequences are still consistent, he will be immediately, inevitably, invariably, and proportionately dissatisfied. If he is not hungry (the motive of hunger being absent) and does *not* eat, the consequences are still consistent. In the circumstances, if the child is permitted without interference to select an activity, the resulting pattern is determined by the consequences, which are consistent. If the adult should interfere, by coaxing or punishing, the circumstances are altered. No longer has the child a simple choice, (*a*) to eat, (*b*) not to eat (followed by the consistent consequences inherent in the situation), but now the choice is (*a*) to eat—and be satisfied, (*b*) not to eat—and be coaxed, bribed, or punished. The coaxing may satisfy another motive, irrelevant to the eating situation, namely, the desire to dominate, and this leads to a confusion of the motivating situation (cf. Chapter VIII). If the child is

not hungry and is given a sweet to "load the dice" in the direction of eating rather than not eating, he literally has his cake and eats it. He may now expect this consequence to be attendant upon each meal-time. Such an arranged consequence is called "bribery" in our civilisation, and implies that the goal is not worth achieving for its own sake but must be enhanced in some way. The second rule—a supervising adult must be able to recognise situations in which the *relevant* consequences are consistent, and in such situations the child should be permitted to make his own choice without interference.

Now let us consider a situation in which the consequences are not relevant. A child may be expected to wash his hands before he comes to the table to eat. There are no relevant consequences inherent in this learning situation. This is an arbitrary rule, a social custom which has little biological significance. It is uncomfortable, for those who have already acquired this pattern of behaviour, to sit at meals with someone who has dirty hands. It is a local community custom, by no means universal, which is, nevertheless, no less desirable on that account. A consistent consequence must be arranged in this learning situation, if the child is to learn readily. The child must have a free choice, (a) to wash his hands—the consequence will follow that he may then sit at the table and eat with the family or with his companions, (b) not to wash his hands—the consequence will follow that he is not permitted to sit at the table. Notice that this consequence is immediate, inevitable (if the adult is not swayed by affection or sentiment), invariable (if the adult has enough self-confidence not to use another device such as bribery or coaxing), and it is adequate in that the child sets the time-limit for refusal. If he delays too long, the meal will be over and he will miss his food. The child may say (or think), "This is certainly a silly,

inconsiderate rule." The adult agrees! It *may* be silly, inconsiderate, arbitrary, useless, etc., etc., and yet the adult, as stated above, finds that the rule makes for comfortable, æsthetic, agreeable living. She implies that, as long as the child wishes to enjoy *community* life, he is expected to *conform*. If, when he grows up, he can find a group who do not think hand-washing important, he may gather them together and live under different conditions. Such arbitrary decisions will, of course, arouse resentment in the child. But then the child must learn to accept conformity as the price of certain other satisfactions in social living. There need be no hypocrisy on the part of the adult, nor inconsistency in the consequences. The personal comfort of the adult is advanced as the origin of the rule. If the rules are too difficult, the child will try to avoid society, but will then be deprived of the enjoyment of social living. He may consider isolation worth enduring. The adolescent child often considers adult rules stupid, useless, and old-fashioned. The adult, usually insecure, promptly forbids the adolescent to behave according to the rules of his contemporaries. Childish resentment grows (on both sides) and crises arise. The adult is often too much concerned with enforcing obedience to a rule on the part of the growing child and is seldom sufficiently detached to ask, "Is this rule necessary?" The third rule—the adult must scrutinise very carefully the rules which she is attempting to administer, lest the privilege of belonging to the adult society seems to the child a doubtful one.

When a rule is laid down, three questions must first be answered by the administrator. (1) Is the rule worthwhile? In other words, is the rule so important that it is necessary to take issue with the child if he does not conform? (2) Has the child acquired the ability to conform? One must be sure that the pattern of com-

pliance is within the capacity of the child to learn. (3) Is the adult, having answered (1) and (2) in the affirmative, willing to accept the consequences of the child's free choice? In other words, has the adult sufficient confidence in the consequences that she has arranged to detach herself emotionally from the situation? If the child says, "No, I won't," can the adult refrain from saying, "Please, do it for me," or "You jolly well wash your hands or I'll smack you"? Such behaviour on the part of the adult alters the whole situation, as illustrated above in the case of coaxing the child to eat. If the adult can say calmly and firmly, "Unless you wash your hands you cannot sit at the table with us," and can adhere to this consequence without emotion, then the child will either wash his hands—or not. If he is hungry and his family are a pleasant group to live with, he will obviously conform.

Other situations arise in which there does not seem to be an opportunity for arranging a relevant or inherent consequence. For example, a child may wish to occupy the "centre of the stage" in a social setting in which the adult thinks he should not; or in a play situation a child may refuse to co-operate and may interfere with the activities of others, becoming a disturber and a nuisance. Whenever such situations arise, the adult feels that she should interfere. She has recourse to one arbitrary form of consequence and one alone: *isolation*. She must *remove* the child from the group, on the understanding that the child can return only when he is willing to conform to the rules which he has violated. Such isolation as a consequence should be made immediate and inevitable (here the parent or teacher requires a good deal of training in consistency and patience and emotional self-control) and invariable (because this is the only form of arbitrary consequence which is employed) and ade-

quate (because the child chooses how long his isolation is to endure). Parents often protest, in criticism of this plan, "But my child likes to be removed from the group; when I send him to his room he replies that he wants to go, anyway." There are two possible interpretations of this situation: (1) the child would rather stay in the social setting, but has learned that if he *says* he would rather not, the parent, deeming that he is consequently *not being punished* for his misdemeanour, will change her mind and adopt another consequence less undesirable, or (2) the child means what he says and the parent is (a) chagrined to consider that his choice may be a reflection upon the charm of her society and is reluctant to put the matter to a test, or (b) the parent egotistically thinks that being deprived of her company is too drastic a consequence. (The same description applies to human relationships other than that of mother and child.) The fourth rule—isolation is the only irrelevant consequence which the adult employs, but she must see that the child derives some gratification from conforming. If the social benefits and privileges do not provide an incentive towards conformity, the consequence of isolation will be ineffective.

The removal of a child often involves the use of *force*. The question is often asked, "Should one use force in a plan of discipline?" The answer is, "How can one avoid using force?" Since isolation is the only arbitrary social consequence which may be used, force is often necessary to remove a recalcitrant child. But—force is never used *punitively*. Force is employed to preserve the integrity of the individual, never to destroy it.

The child of a few weeks of age is put to bed after being fed; the mother obviously uses force. The child is carried from one place to another by the mother; the child is "forcibly" bathed, clothed, etc. A child leaning

out of a window and in danger of falling, is forcibly restrained. A child refusing to go to bed when the parent decides is forcibly carried to bed. (A child is not forcibly made to go to sleep, for obvious reasons.) A young child is forcibly confined to a playground by an impassable fence, to avoid the danger of his being injured upon the nearby street. As the child grows up and accepts more and more responsibility for his own choices, the use of force decreases until ultimately it is no longer employed. The child has become a "mature" adult and the parent is no longer responsible for his behaviour. Whether the child, by the time he has grown up, has learned to accept full responsibility depends entirely upon whether the plan of discipline outlined above has been followed or not. The fifth rule—whenever the responsibility for carrying out the details of the plan of discipline rests upon the adult, force, as a sanction, is justified.

There is no place for punitive measures, such as corporal punishment, in an effective plan of discipline. Punishment, as a concept, arises out of primitive mysticism. Revenge as a *human* pattern of behaviour is inconsistent with advancing civilisation. Psychologically, punishment, as a device in aid of learning, defeats its own purpose. Punishment suggests a *quid pro quo* situation; the teacher says, "If you do thus and so, you will suffer this and that." Surely, if the "miscreant" is willing to suffer "this and that" he should be permitted to do "thus and so."¹ Punishment never solves a problem,

¹ Whenever primitive "justice" has been used, the results have been disappointing, e.g. the Inquisition. Gradually the use of such measures has died out. In England the decline in the curve of violence kept pace with the reduction of flogging, capital punishment, deportation, etc. The principle in Britain of unarmed police and the discouragement of "third-degree" methods has yielded saner results than the other methods.

but creates a new one. Revenge starts a cycle of human retaliation that can never end.¹

An ideal plan of training would produce an individual who wishes to conform within reasonable limits providing certain privileges continue to be left inviolate. One important privilege is the preservation of the dignity of the human being which cannot be retained after experiencing the degradation of physical violence inflicted upon one human being by another. The argument that nature inflicts pain as a consequence (e.g. the child and the candle-flame) is not the exception that proves the rule, but rather a lesson in the difference between human and other destinies.² The survival of the philosophy of "an eye for an eye" shows how stubbornly the members of a society adhere to the principle of "might is right."

The administrator (parent or teacher) detaches herself from a situation to allow the child untrammelled choice. She does not attempt to influence his choice by appeals to sentiment or affection. The "human" element, however, is never divorced from such choice, because the adult is always *in* the situation; the adult as a teacher is *in* the situation as a model of adulthood. Unwittingly (but not unconsciously) the child evaluates the adult and is impressed either favourably or unfavourably. The success of a plan of discipline, especially in non-relevant situations, depends upon the adult personality. In a large measure the teacher or parent implies the social goal to be attained. "Follow my plan and

¹ Cf. Shelley's *Essay on Christianity*: "Had revenge . . . any other effect than to increase instead of diminishing the mass of malice and evil already existing in the world?" . . . "Mankind, transmitting from generation to generation the horrible legacy of accumulated vengeance, and pursuing with the feelings of duty the misery of their fellow-beings, have not failed to attribute to the universal cause a character analogous to their own" (*Shelley's Prose in the Bodleian Manuscripts*: A. H. Koszul, 1910, pages 30-31).

² Why does a judge enjoy a more dignified position in "civilised" society than the hangman?

you will grow up to be like I am" is implicit all the time the child is in the society of the teacher or parent. The teacher, whether of classics, physics, medicine, or the arts, in the University, Elementary School, or Nursery School, and the parent in the home, by their behaviour, set a standard of living, portray a philosophy of life, and suggest desirable goals. (Is it any wonder the child is often discouraged!) But the teacher should never deliberately "use" her personality to influence the pupil. (She may use it to influence her contemporaries in a non-teaching situation.) She administers the plan of discipline herein described, and if the pupil responds favourably, she has succeeded and can be assured that the pupil has learned not merely to obey "her," but to obey the dictates of his own "plan" which he has learned from her. *What* the child learns depends upon the inspiration of the teacher; *how* he learns depends entirely upon the fundamental principle of biological growth, which is outside the realm of social influence.

In many teaching situations in the past the adult or teacher has invariably used some device for motivating the child: a prize (bribery); approval (social bribery); punishment (negative inspiration),—these are ineffective consequences. Motivating situations which are relevant assure the success of a teaching programme. Furthermore, the child's gratification in learning is enhanced.

CHAPTER VI

PERSISTENCE

A CHILD sits on the floor trying to put his shoe on his foot. He tugs and pulls, his toe catches in a lace, the heel is a hummock which does not fit, the tongue of the shoe is folded inside and prevents the foot from slipping into place; in pulling out the tongue the child pulls the shoe off altogether and starts all over again. Watching the child, we are observing him while he is learning. The psychologist, in his laboratory, may set up controlled and ingenious situations to study the progress of learning, but while such studies are necessary to supply the detailed data for further analysis, anyone who watches a child living may study the outward signs of learning.

Here is a child trying to put the multi-coloured rings over the peg of a Russian toy; another is turning the pages of a book in slow rhythm; there is a little girl piling one block upon another, the pillar trembles, leans, and falls, and she begins all over again.

The most significant characteristic of learning behaviour is the "mistakes" that are made. To the adult, who has already learned to put on his shoes rapidly and efficiently, the difficulties into which the child is led appear rather stupid and unnecessary. "Why can he not see that he must keep the tongue out of the way?" he thinks to himself. He can hardly refrain from leaning down and telling the child. The errors, impasses, the mistakes, the failures, the opportunities missed, the clues misinterpreted, the cues confused—these are the accompaniments of all learning.

In the early stages of a learning programme the mistakes, or failures, far outnumber the correct, or "successful," attempts. Out of his past experience the child

selects the pattern which he judges to be adapted to the solution of his immediate problem. He experiments and discards in terms of his immediate goal. He pushes, the shoe is still perched precariously on his toe; he pulls, the shoe comes off. He examines it carefully and then turns it upside down and puts it over his toe, and so on. He continues until either (a) the shoe slips on or (b) he gives up and starts on another problem, e.g. taking his stocking off. If the shoe slips on, he may stop this activity, depending on whether he was interested in getting the shoe on his foot or *learning* to get the shoe on his foot. In the latter case he will take off his shoe and begin all over again. Thus "success" must always be interpreted in the light of the goal which the individual has in mind.

The "acts" which he selects from time to time are judged as "failures" and "successes," and will be discarded or retained in the light of his immediate judgements.

At first, the appreciation of failure is more important than the recognition of success.¹ The individual identifies both failure and success with the goal which he has in mind. Having accepted the challenge of overcoming the obstacle, the effort expended in *his* attempt is identified with the goal, which is always personal because of its self-reference. The gratification of the individual inheres in the effort which is expended. It follows that the more difficult the task, the more frequently will failure be experienced, and hence the individual derives more gratification from a difficult than from an easy task. The goal is the more appreciated the more effort is necessary to achieve it.

Thus there is inherent in the learning mechanism a source of enjoyment to the individual, dependent upon

¹ Cf. Blatz, W. E., "The Importance of Failure" (*Bulletin of the State University of Iowa, Child Welfare Pamphlets*, 45, 1934).

the fact that he has accepted the challenge with an *approach* attitude. The more difficult the task, the more enjoyment. If this mechanism is not interfered with, the individual soon learns to enjoy the attack on the more difficult problems, providing, of course, that he may expect ultimate success. He learns to judge his capacity so that he will not undertake a task which is obviously too difficult. Ultimate success depends upon how urgently he looks forward to the goal, upon his inherent capacity, and, finally, upon whether he persists or not. His persistence, in other words, grows with his experience. His stick-to-it-iveness is an acquired pattern and is dependent upon the opportunity afforded for learning that effort is enjoyable in itself and becomes more enjoyable if self-directed.

The mechanism for learning that effort is thrilling is present in all children, but must be fostered. During the early days of childhood the adult finds it difficult *not* to interfere with this mechanism. The most common form of interference is to use social pressure to alter the value of the goal. Thus, if the mother intimates that the goal is very dear to *her* heart, the child becomes more interested in the goal because of this fact and less interested in the process of attaining the goal ; e.g. the mother may say, " Please wash your hands, to please me," Furthermore, undue social emphasis is often placed upon failure, e.g. the teacher may say, " Anyone with more than two mistakes in spelling should be ashamed," or the mother may say to her child, " Always remember that the Smiths *never* lie." In such circumstances the child " withdraws from " failure ; since mistakes are to be avoided at all costs. In order to accomplish this he either (a) attempts only easy tasks and thereby avoids the possibility of repeated failures, or (b) conceals his failures through some form of deception, e.g. copying. The

parent may, with the best of intentions, train the child to "give up" rather than "persist," and wonder why the child is so "perverse." Undue emphasis upon the results of learning by praise or thoughtless criticism of failure, or by *blaming* the child for mistakes, is the cause of lack-of-persistence in most children.

Social approval and disapproval, as incentives, inevitably prove ineffective. To strengthen this influence, some parents and teachers adopt the policy of giving tangible evidence of their approval and disapproval in the form of *prizes* and *punishments*. Because they *seem* to be immediately effective, prizes and punishments have come to be an accepted part of many educational programmes. A prize or a punishment is a device for altering the desirability or undesirability of the goal. The child is promised that if he increases his skill he will be given a prize. The implication must be obvious to the child, that the teacher considers the skill itself to be worthless, and the prize the important goal. A prize, as an incentive, is almost universally offered in the educational institutions of most countries. Adults seem to forget their own youth.

Let us imagine the mother standing over the child who is trying to put on his shoe. At every false move she says, "No! That's wrong," or "My goodness! You certainly are stupid," or "Let me show you." Would the child not be justified in saying, "Look, Mum, who is putting on this shoe, you or I?", or "O.K., put it on for me," or "I think I'll take a walk"? Would pupils, if unimpressed after scrutinising, at the beginning of the year, the prizes offered for the best performance at the end of term, not be justified in deciding not to learn anything? Supposing he already has a leather-bound copy of *As You Like It* (offered as a prize in Third Form Literature), should one still try for it? Furthermore, if a prize

is offered for the best performance in a class of forty, surely a student who decides that he ranks with the other thirty-nine must seek some other form of gratification. (One private school solved this problem by giving a prize to *each* pupil in every class in the school! Obviously, the appeal was intended for the parents.)

The punishing of mistakes implies that mistakes should never occur. Since learning cannot proceed without failures, the use of punishment suggests that one should never learn. Most children conclude that the teacher delights in using a red pencil. Observation of children "playing at school" often reveals illuminating insights into their concept of teaching. One child of seven was seen lining up her dolls and spanking them in turn, saying, "You're going to deserve this some time; I might as well get it all over with now," then she proceeded to intone a lesson!

The effect of prizes and punishments upon the competitive reactions of children is discussed more fully below. It need only be mentioned here that competition in a formal learning situation is a violation of the principles of teaching.

Approval and disapproval can never be wholly absent in a social situation. Whenever student and teacher are together, there is social interaction. The emphasis, however, should be placed by the teacher upon *effort* and not upon the *end-results* of learning. The teacher should show approval of the attempts and trials of the pupil and should indicate, where necessary, that the pattern which the child has selected may *not* result in success, but that the child may choose whether to change his attack or not. Such assistance should be offered only where the teacher knows that the capacity of the child is unequal to the challenge of the task he is undertaking; where, even with

persistence, the child may not succeed within the span of his attention. The teacher must use her own judgement. If the end-result of learning is not immediately significant to the teacher, the child should not be disturbed; his failures are his own concern. For example, the child is expected to wash his hands before meals, but finds difficulty in turning the tap on or off. Since this obstacle is, at this juncture, irrelevant to the main learning programme, the child may be assisted. Learning to deal with a recalcitrant tap is another task. If, on the other hand, the child chooses to build a castle of blocks and finds difficulty in placing the pediments on the rather shaky pillars he has raised, no assistance should be given, even though the child gives up the task, unfinished. Obviously, he was not sufficiently motivated to complete the task. What difference does it make whether he finishes it or not?

A large, well-organised, and well-equipped boys' and girls' summer camp in Ontario eliminated trophies and prizes for competitive camp activities. It had been the tradition in the camp to hold quite frequent competitions in paddling a canoe, sailing, boxing, trail-finding, swimming, etc. A prize was formerly presented for the best performance, but now, without the incentive of a prize, the number of boys and girls participating in the various activities has increased two- and three-fold. Whereas, before, the children chose the activity in which they hoped to excel, now they choose on the basis of interest. Since there is no need to "compete," they may now choose more activities in which to enjoy their efforts. Exhibitions are held at intervals, but there is no need to encourage the children to enter the lists because they are already interested in the activity and not the prize. Those with lesser skill also enjoy the carnival. After all, prizes are irrelevant encumbrances to childhood.

Father does not give Mother a prize for "the best meal of the week" !

The scholarship system may be criticised as being an inefficient plan for stimulating "scholarship." A pupil should be given an opportunity to continue his schooling because of his manifest interest and achievement. The opportunity should not depend upon the largesse of a private donor nor the whim of the examiner. Anonymous bursaries, anonymously held, would be a better plan than the present method. Ultimately, the foundation of free State schools would overcome the shortcomings of the present system. Private donations could then be directed into research channels, where they are badly needed.

Persistence is necessary in order that learning may be efficient. Whether the child is learning to swim, to spell, to paint, apply mathematical formulæ, parse a word, speak the truth, be kind to animals, respect private property, the mechanism is the same. Mistakes are made in all learning programmes. A mistake in learning to spell is made in exactly the same way as a mistake in learning to speak the truth, but in the latter situation the mistake is often called "a crime" or a "sin." Undoubtedly, one may distinguish between spelling and truth-telling ; the one is a scholastic achievement, the other has "moral" significance. Whether this distinction is useful or not, the learning in both cases is exactly the same. If we are anxious to teach the child to speak the truth, we must look upon him as a student, not a culprit. He will make mistakes, i.e. he will lie. No human being who learns to talk ever grows up without lying, at least once ! Nor, for that matter, without, at least once, stealing, showing unkindness, expressing ingratitude, etc. These are failures, and if the child is dealt with as a "learner" he may ultimately become

efficient in the practice of the approved virtues. But if he is punished for the mistake, he may learn to deceive ; and if he is given a prize for the practice of the virtue, he may place a material value upon it. After all, " Virtue is its own reward."

Are persistence and stubbornness synonymous ? Stubbornness may be defined as persistence directed towards a disapproved goal. The distinction between them is made by a judgement of an observer. However, if the child persists in non-conforming (i.e. is disobedient), an analysis of the situation must be made to decide whether he is persisting in order to satisfy the want of dominating, or not (see Chapter VIII). If he is interested in " getting his own way " merely for the sake of " winning," then he may be called stubborn. The treatment of such a child is self-evident. If trained according to the plan of discipline suggested above, a child would never be interested in such an empty " victory."

The child learns to persist in his efforts because he accepts the challenge of his own inadequacy. He thereby develops a scale of values which is at variance with many of the accepted standards in present-day life ; e.g. he would not be interested in cash-value, publicity-value, or prestige-value. His standards are determined by effort. He judges his own achievements in this light as well as those of others. In this fashion his appreciation of the efforts of others, identified with his own, cannot be distorted by false values such as stimulate envy, jealousy, disparagement, flattery, etc. ; rather, this type of training fosters consideration for others. When an employer, such an individual should never be guilty of some of the devices used in present-day industry ; such an individual should never be deceived by false values in art and craftsmanship. Many people deplore the present-day lack of pride in craftsmanship ; unless

an individual is trained from birth in the persistence of effort towards his self-imposed and self-evaluated goal, such pride can never be part of his experience.

Persistence is the second factor which influences learning. A child may persistently use efforts to develop his capacity—or not, depending upon the plan under which he learns. The plan of training described herein, if used by parent and teacher, will engender persistence in the children under their care.

CHAPTER VII

MOTIVATION

SECTION I. GENERAL STATEMENT

MOTIVATION, the third factor which influences learning, will be *fully* understood when the mystery of life itself is solved. In the discussion above (Chapter III) it was pointed out that the search for the answer to the question "Why?" was beyond the horizon of scientific enquiry. Unless one can *state* the problem involved in the study of human motivation in a form such that the scientific method is applicable, further psychological enquiry is fruitless. The problem *may* be stated in the form of a question. How do the factors which determine, at any time, the specific activity of an individual operate?

Life is taken for granted. The energy for human activity derives from the fact that a human being is alive. We cannot pierce this veil at present (if we ever shall is a controversial point). A human being, if alive, acts. At every moment of his life he *does* something. From the repertoire of his abilities (not capacity) he will select *one* pattern as applicable to the moment, in terms of biological function and environmental situation. There must be certain identifiable factors which influence the *selection* of the pattern which is manifested. Such factors are here defined as *motives*.

The reader is reading these words at the moment. There are certain factors which determined the choice of this book rather than another, of reading rather than eating, of being where he is rather than somewhere else, and so on. A programme for studying such factors must conform to the accepted rules of scientific procedure. Observation leads to generalisation after classification.

Predictions may be made and verified—or not. Demonstrations may be arranged and experiments conducted in approved fashion. The outline presented below has been made from data so gathered and systematised.

A motive may be defined as any factor which affects the selection of a particular pattern of behaviour. A motive cannot be “unconscious,” because, in order to select an activity, some element of the motive must be part of the child’s consciousness of the moment. Undoubtedly, the child is seldom able to identify, fully, the motivating influence. Nor is the conscious aspect of the motive always in the centre or focus of consciousness.

The child is never conscious of the life-force, but always of the motivating factor. An individual is never conscious of being “alive.” He is only conscious of acting. Since acting is continuous, he interprets acting as “life.”

The study of motivation, as defined, is important. If we know the conditions in which a human being will act in a certain manner, his behaviour may be controlled, not only by others but by himself. If all the factors involved in “stealing,” “murder,” “copying,” “lying,” were known, control of such factors might result in the elimination of such behaviour. If all the factors involved in “co-operation,” “friendliness,” “human sympathy,” were known, by suitable arrangements such traits might be fostered. At the present time it is only fair to state that much remains to be learned about motivation, but sufficient is known to warrant some suggestions for effective lines of procedure in child-training.

Needs and Wants

Before proceeding with a discussion of motivation, the distinction must be made between our use of certain terms, such as incentive, need, wish, want, desire, etc., and the common usage.

<i>Needs</i>	<i>Wants</i>
Innate :	Acquired :
Organic—vague.	Perceptual—specific.
Stable in function.	Unstable in reference.
Limited in number.	Infinite in variety.
Universal in distribution.	Individual differences marked.

A *want* is defined as the projection into the environment of the individual's interpretation of his need. A *need* is considered as the demand of a motive for satisfaction.

Needs are dependent upon the biological functions of the organism, are innate, stable throughout life, and limited in number. Being innate, they are universal in distribution. Each individual of a species has the same needs. Wants, on the other hand, are derived from the individual's personal experience of his needs. One cannot have a want which is not derived from some experience of the past. A want is specific. The wants change in character, often overnight, and are never limited in number or design, but determined only by the enlarged or restricted experience of the individual. Furthermore, wants are individual ; common wants are developed only by common experience. Thus, hunger is a need, but meat is a want. When one experiences the *need*, i.e. recognises the need through interpretations of vague bodily sensations, for food, the *want* is usually expressed in some specific form such as potatoes, meat, or vegetables, or even more specifically, potatoes *au gratin*, roast beef, and boiled cabbage. (Food is a concept. One never wants food, but always a specific food substance.)

At every moment an individual makes a judgement upon his immediate felt need and his assumed want. His judgement largely determines the choice of behaviour,

and since the individual can never wholly, completely, or accurately discern the nature of the need through his senses, there may be a false interpretation of the need. Furthermore, since the relation of the want to the need is also a matter of experience, one is often, if not invariably, formulating a want which may not satisfy the need. Only through experience can an individual learn to correlate these two factors in more exact approximation. Often the child gets what he thinks he wants only to find that it does not satisfy what he thought he needed.

A need "demands" satisfaction. Under the stress of organic activity the individual strives in the direction determined by the need. The achievement of an anticipated want is called "gratification." It is the individual as a whole who is gratified. We do not talk about the satisfaction of a want, since "gratification" is a more comprehensive term than "satisfaction." At any instant the need of the moment, e.g. hunger, may be satisfied, but the individual may not be completely gratified, e.g. he may have wanted a grilled steak but have eaten a wartime sausage. One need is always demanding satisfaction at any time, but there may be more than one to be satisfied at the same time (see below). After satisfying a need, the individual immediately comes under the influence of another need. Gratification includes not only the satisfaction of an immediate need, but the total adjustment of the individual, past, present, and future.

A want may be called a wish or a desire. The want is always, by definition, conscious. One cannot have an unconscious want. The need, derived from a motive, always has conscious correlates, but often these may be in the background of consciousness, and the individual, attending to some other aspect of his conscious life, may be immediately unaware of his need, e.g. an individual may

CHART

THE PHYSIOLOGICAL

<i>Appetite</i>	<i>Physiological Substratum</i>	<i>Instinctive Response</i>	<i>Rhythm</i>	<i>Sensory Attribute (1)</i>
<i>Hunger</i>	Ingestion Digestion Assimilation	Suckling Swallowing Peristalsis	Irregular at birth Later every 4 hours for 6 feedings daily Adult 3-4 times daily	"Appetite"
<i>Thirst</i>	Pharyngeal mucosa Fluid balance	Swallowing Absorption	Irregular, largely dependent on environmental factors	"Thirst"
<i>Elimination</i>	Activities of: Skin Lungs Kidney and bladder Lower bowel and rectum	Perspiring Breathing Urination Defecation	Irregular 174 per minute Irregular 1-4 times daily	Skin nerve endings Tension Pressure
<i>Rest</i>	Fatigue Activity of muscles, etc	Relaxation Sleep	Variable Irregular at birth Longer intervals 1 period in 24 hours	"Tiredness" "Sleepiness"
<i>Change</i>	Adaptation	Change of attentive adjustment	Fundamental interval with wide individual variation	"Boredom"
<i>Sex</i>	Organs of reproduction Other erogenous zones	Manipulation Coitus	Irregular in modern society	Sensory gratification

I

APPETITES

Maturation	Modification		Behaviour Problems due to Faulty Training
	Social demands	Individual enjoyment	
Teething Development of digestive tolerance	Use of utensils Cleanliness Tidiness Quiet Certain food tabus	Development of likes and dislikes Addition of other sensory factors, e.g. preparation, companionship, etc	Food refusal Greediness Stereotyped choice
Increase in amount required with increase in bodily weight	Very few Drink from glass or cup	Satisfaction Little interference	Few
? 2 ? 2 Myelination of reflex fibres Change in constancy of stool	? 3 ? 3 Control, Sanitation Privacy Modesty Reticence	"Glow" "Well-being" Satisfaction in performance	Enuresis or retention Soiling or retention
Decrease in need of sleep More extended periods of activity	Adjustment to vocational demand	Kinæsthetic awareness of relaxation	Insomnia Tension
Longer periods of concentration	Vocational interests Concentration	Gratification accompanying effort	Excited activity Lack of interest Lack of ambition Day dreaming
From: Impotency to Puberty Adolescence Potency	Pre-marital: Modesty Decency Reticence Non-practice or chastity	Post-marital: Restricted intimacy Delicacy Limited discussion Fidelity	Sensory satisfaction later Bisexual gratification Prudery Promiscuity Masturbation Frigidity

work away at an interesting task long past meal-time, and when interrupted be surprised to find that he is hungry.

“ Incentive ” is the term applied to a combination of need and want. In order to induce the child to wash his hands before meals, the “ incentive ” held out is that he

Referring to Chart 1, it may be seen that, in connection with each appetite, there is a physiological functioning apparatus ; an instinctive response by which the child adjusts at birth to a propitious environment arranged for him ; a definite cycle of activity, a rhythmic, alternating performance. After the appetite is satisfied, a period of rest or quiescence (not altogether physiological but partly psychological) ensues ; a conscious attribute of each appetite represented partly by specific sensory awareness. Through this awareness the later modification of the behaviour pattern may be controlled ; maturation follows the direction of the inherited plan ; finally, some modification of the original response-pattern as the child matures and grows up to live in a social community.

1. There are no words in English, as yet, to name the specific sense-experiences associated with each appetite. Each one of us recognises the experience, however, whether named or not.

2. Undoubtedly there are maturation phenomena in connection with perspiring and breathing, but, as yet, no useful study has been made upon them with this reference.

3. Although social rules cannot affect these two functions directly, the individual, in some societies, must behave in a definite way in order to conform, e.g. bodily cleanliness and oral hygiene may be over-emphasised in modern advertising, to the detriment of comfortable social adjustment, especially during adolescence.

may satisfy the need of hunger and gratify his wants by eating with his family group.

SECTION 2. THE APPETITES

The appetites form the first class of motivating factors. As seen in Chart I, there are six appetites, hunger, thirst, elimination, rest, change, and sex; they are similar in function, development, and activity.

Living protoplasm is a unique substance. The physicist defines it as a colloid and has studied and described its physical properties. The chemist can tear it apart and analyse it and find it is made up of carbon, hydrogen, oxygen, nitrogen, and a few minerals. But no scientist has yet discovered what it is that makes it "work"; he is like the little boy who takes his watch apart and finds that the little pieces cannot separately "tell us the time," but only when put together again and working as a harmonious whole does it behave as a watch—not that a living organism is exactly like a watch.¹

Life, however we define it, is the origin of living behaviour. We must accept, but never ignore, its presence. The scientist can analyse the mechanism of behaviour, but never the purpose of living.

If we cannot solve the mystery of life, we can at least study how living things behave. All living things must

¹ Cf. C. S. Sherrington, *Life's Unfolding* (London, Watts & Co., 1943). "Chemistry and Physics refuse to define life; they eschew the word." The scientist, of course, is entitled to discard any word which is troublesome, providing the *concept* is not discarded. Watson, the behaviourist, also eschewed the word "consciousness," but was logically consistent in discarding consciousness as well. He threw out the baby with the bath water. The modern scientist is in the same dilemma. Sherrington, on page 62 (*ibid.*) states, "Protein synthesis is in flood—a riot of activity, but always an *ordered* riot." (The italics, ours.) What is this order? What orders the order? These are questions which cannot be answered by the scientific method, because by such a method the problem cannot even be studied. Again, page 73 (*ibid.*), "... the 'seeing' by the brain behind the eye? Physics and Chemistry, then, are silent to our every question."

get fuel to keep themselves alive ; this fuel is called food. All living things must " eat " and digest or use what they eat. All living things require water. The water and the food are used and the unused portion is got rid of (metabolism). All living things must rest after periods of activity (fatigue and recuperation). All living things respond to the environment (irritability). In the higher orders there is some means of intercellular communication (conductivity). All living single cells, and the more highly developed complex cell groups, have some provision for perpetuating their species before death supervenes (reproduction). Most living organisms can move about (motility). All these functions that have been described are present from the highest to the lowest. They are, of course, most obvious in the higher species ; in man we identify these functions with the appetites—hunger, thirst, elimination, rest, change, and sex.

A child is born with these appetites already functioning. As he grows up he learns, more or less efficiently, to identify each one, since each is accompanied by particular and specific conscious attributes. Of course, he cannot always distinguish one from the other and he is often confused. In fact, one never achieves perfection in such discrimination.

Each appetite is associated with the functioning of some part or parts of the body. When the body is in need of food or fuel, something happens inside the individual and he becomes aware of the lack of something. The organism becomes aware of a need. Thus, at regular intervals, the child needs food and he becomes aware of this need through his recognition of the " symptoms " of hunger. Hunger is an appetite. Under the imperative influence of the need the child strives for gratification, which is accomplished through the satisfaction of the appetite in question. The young infant, through his own efforts, cannot always

satisfy the appetites, and dissatisfaction is manifested in the only way in which he is able to do so, namely, by restless activity and crying. Restlessness remains throughout life as a sign of an unsatisfied appetite ; crying may disappear in most adults. So, when a child is restless and crying, we know that an appetite may be unsatisfied, but we can never be sure of exactly what he needs. Furthermore, we are never sure whether the child, himself, knows what he needs ; the parent, then, tries to discover what it is that will apparently satisfy the need and gratify the child.

As a child grows up he learns to identify his needs more precisely in that he knows when he is thirsty, hungry, tired, etc. But this is only one step in his learning, because he also learns to recognise those arrangements which will satisfy the need. Thus, he learns that the bottle, which he recognises by its shape and colour, will help to satisfy his hunger. When hungry, he will think of the bottle or breast in terms of taste, smell, and sight. The nipple in his mouth, his suckling yields the fruits of effort—his restlessness and crying cease. He *wants* the bottle, he *needs* the food. Later on he will want many things, chocolate, ice-cream cones, sweets, vegetables, lemonade, and so on, but only after he learns about them.

Maturation is manifested in the case of each appetite, but the duration of its influence varies, as will be indicated below.

The child, almost helpless at birth, must be given an opportunity of learning how he may satisfy the appetites through his own efforts. Presented with fluid food through a nipple he can suckle, and is then not a bit helpless. But he cannot prepare his own food ; this must be done for him. As he grows up and becomes more mature, he must learn to chew rather than to suckle, then he must learn how to carry the food to his mouth with his

hands, and later learn to use a spoon and a fork and the other "tools" prescribed by custom.

During this process of maturation and learning he discovers that there are rules and regulations which he is expected to obey. There are rules and regulations in connection with each appetite; each society has its own customs, each community its own traditions. Throughout the history of the race there has been an accumulation of such rules. Without someone to teach him these rules it would be difficult for a child to learn them. He would learn his own individual techniques, which later might not suit the community demands. Its rules are usually restrictive. It is often difficult for the average adult to understand the restrictive nature of some of the rules, because he has learned to accept them as a matter of course. For example, an adult seldom regards eating with a knife and fork as restrictive in nature, because the skill in handling these instruments has been practised so often that using them does not impede the satisfaction of one's hunger. A child, however, must learn to control the tendency to gobble down the food with short shrift and instead to place the food on the spoon, then get the spoon to his mouth with the food unspilt, and then propel it from the spoon into his mouth and only then to swallow. So, also, with his eliminative functions, the child must learn to control his activities until the time and the place for adaptive functioning are appropriate.

In connection with each appetite there is a social demand for control. Society expects the child to *conform*, to *obey*. This conformity and obedience tend to diminish the gratification which is enjoyed when an appetite demands and an opportunity is provided for satisfaction. A restriction of this kind precipitates a "conflict" between personal enjoyment and the necessity

for social conformity. The child must learn to adjust to this conflicting situation, usually at the expense of his personal enjoyment. Conflicts *must* be resolved. "Resolution of a conflict" is the term applied to such a learning situation. The teacher must arrange for the resolution of such conflicts, so that the later adjustment is not prejudiced.

The teacher (who in the first two years is usually the mother of the child) must be careful not to emphasise either aspect, i.e. conformity or enjoyment. It is possible, through undue influence such as punishment or fear, to train the child to conform, and to all *outward* appearances he may conform, but there is always an inner turmoil due to the feeling of frustration and the lack of gratification. On the other hand, if a child is permitted to obtain his gratification without conforming, he would undoubtedly act anti-socially, and would later find it impossible to live comfortably with others because of the inevitable unresolved conflicts which would arise in social situations. During the first five years of life the habits of "resolving conflicts" are built up. Such habits are often life-long in duration, and so the early years are important for laying down the foundations of the child's attitudes towards his appetitive needs.

A training method which affords the best results takes into consideration both the child's enjoyment *and* the necessity for conforming. If the teacher develops in the child a *want* to conform and demonstrates that conformity does not necessarily deprive the child of *all* satisfaction, but often enhances the gratification, then the education may turn out satisfactorily both for society and for the individual.

Each appetite will now be discussed separately.

1. *Hunger.*

A child needs food. The adult is responsible for providing nourishing food, in adequate amounts and in appetising form, at convenient times. The rhythm of the appetite of hunger at birth is not exactly known, but there must be wide individual variations. In spite of this, however, a four-hour interval during the day is assumed to be adequate for most infants and the meal-times are arranged accordingly. If the meals are consistently presented at such regular intervals, the child *learns to be hungry* at such times. The child's physiological functioning has conformed to the social demands. Unless this arrangement is consistent, the child will be hungry at odd hours and will expect to be fed according to his whim. Feeding at regular hours is one of the easiest patterns to teach a child. Later on, the meal-time interval is extended, depending upon the community custom.¹

Next we have to consider the training of the child in *methods* of eating. He must learn to eat in a manner which is acceptable to the rest of the community. He must not be expected to perform with a skill which is beyond his capacity or maturity. There is a regular sequence of skills just as in any other learning programme—he learns to drink out of a cup, later he uses a spoon, then a fork, and then a knife and fork ; each one of these steps may be more difficult than the preceding. Once he has acquired a skill he should no longer be assisted ; in other words, if he has learned how to handle a spoon expertly, he should be left to feed himself.

A child who shows a disinclination to eat at any single meal-time is probably not hungry. The food should not

¹ Many times, in England, I have been told that missing one's tea gives one a sense of loss similar to missing any other meal. Some have even included "elevenses" in the same category.

be forced upon him either by bribery or assistance ; the next meal may find him eager and enthusiastic. The introduction of new items in the menu should be arranged in a matter-of-fact way ; the child is trained to anticipate occasional new and exciting dietary adventures, and if he refuses, the refusal should be accepted as a matter of course and the article of food reintroduced at a later time, but no familiar food should be substituted on this occasion. The aim of this training is not that the child should eat everything with equal relish, but that he should have an opportunity, through a variety of experiences, to develop his *own* likes and dislikes. He should, of course, expect no substitute for what he refuses ; he just goes without.

The most troublesome problem to handle is the child who refuses an article of food because of his resentment against the person who is offering it. An attitude (cf. Section 3, on "The Attitudes") of rejection has been learned. By offering the specific dish without comment and, upon his refusal, substituting nothing in its place, the problem may be solved. Patience and forbearance are essential on the part of the adult.

The meal-time should be friendly, but the social enjoyment should be secondary to the enjoyment of the satisfaction of the appetite of hunger. In the home, if the children are at the table with adults, the conversation should include them and should be pitched at their level of interest and comprehension. Meal-time is not a time for business. If it is an *adult* meal, the children should be excluded.

In a nursery school the children soon learn the social formula which is expected of them. Small helpings are served. Whether they are served at the table or in cafeteria style, the child soon learns the necessary steps in the pattern. Usually an adult sits at the table with the children. Her task is to eat with the children and

by her example, show the children how an adult should eat. Being the only adult at the table, she finds it easy to join in their conversation if she is included. She permits them to initiate whatever topic they wish. She assists the younger children especially, whenever their skill is inadequate to deal with a situation. A child's observation of the social behaviour of others, especially of older children and adults, is effective in providing a model which the child may copy, or not, as he chooses. There is never any necessity, on the part of the adult, to use competition as an incentive.

The meal-time should be quiet. Hilarity and boisterousness are not necessary accompaniments to an enjoyable meal-time. The atmosphere created in a dining-room by the adults is quickly appreciated by the children. They find that confusion, noise, hilarity, interfere with their own enjoyment. The boisterous child is a nuisance and should be excluded. He learns, in time, to make use of the subtler opportunities for enjoyment provided in this situation.

The child should derive no gratification from refusing food. He is permitted to sit idly while the others eat with apparent enjoyment. No one pays much attention if he says, "I can't eat potatoes." (Note the absence, in young children, of sympathy, envy, and commiseration usually expressed by one adult to another who has commented upon his gastronomical idiosyncrasies !)

Today many children are known to have allergies. A certain food, if eaten, will cause disagreeable symptoms, such as hives, nausea, head colds, etc. Such food is excluded from the child's diet, without undue stress or comment. Since allergies are often "outgrown," a deliberate experimental offer of such food, at intervals, to ascertain the tolerance of the child, shows that you are not disinterested and such a procedure tends to

prevent "swiping" of, and solitary indulgence in, such food. Diabetic children must be trained carefully to select their choice of diet. One may ask, since the consequences of indulgence are so "unpleasant" for such children, why they do not learn quickly to avoid such food? The answer is that the consequences of their "misconduct" are usually and largely assumed by the parent, and too much sympathy is shown. The child is reacting positively to the inhibition and restriction which he has identified with the parent or nurse who has made the rule and who, mistakenly, uses forceful methods of administration, e.g. locking up such food. If the child understands that the parent is helping and not hindering, he will co-operate.

If the child learns that eating is enjoyable, then a portion of each day is an enjoyable experience. He learns gradually that the rules and regulations, if obeyed, make life more comfortable in connection with this appetite. After all, if one lives to the allotted three-score and ten, one eats for four and a half years! These, at least, may be enjoyed.

2. *Thirst.*

Since this appetite is one of the most important biologically, one finds fewer social restrictions here than with any of the others. There is seldom any necessity for restricting the child's wants. After the child has learned how to drink from a cup or a glass, he may satisfy his need whenever it becomes apparent. Usually, the only precaution is to see that water is provided when the child wants to drink. The tendency observed in children is to drink too little rather than too much.

3. *Elimination.*

The elimination of waste products is accomplished mainly through the skin, lungs, kidneys, and lower bowel.

Since one has little voluntary control over the functioning of the skin and lungs, they enter very slightly into the training programme of young children. Furthermore, since they are (a) biologically so important, and (b) so little altered by direct control, there is little social interference with these mechanisms. (The exploitation of these two functions by industrialists in recent years has had a profound effect upon personality. Emphasis upon "B.O." and "halitosis," with promises of amelioration, are often the cause of serious conflict, especially during adolescence.)

(a) *Elimination through the bladder.* Control of elimination of urine through learning to actuate the bladder-valve is an important training problem in infancy. The urine is continuously secreted by the kidneys, varying in rate and amount, throughout the day and night, and is stored in the bladder. When the pressure attains a certain degree, the sense endings in the bladder wall are stimulated and the sphincter, or valve, is reflexly opened, the abdominal muscles reflexly contract, and the urine is expelled through the urethra. This reflex is an instinctive response and functions at birth, or shortly after.

The opening and closing of the sphincter or valve are controlled by separate mechanisms. Each action is accomplished by its own set of muscles and nerve supply. In the early months this function is wholly reflex in character. It is assumed that the sensory component, derived from the stimulation of the nerve endings in the bladder wall, does not reach the central nervous system during early infancy. In other words, the child, at this stage, is unaware of these sensations. Obviously, under these circumstances, any training at this early stage is ineffective. Maturation proceeds relatively slowly and it is thought that the nervous and muscular union is not complete until after the twelfth month. Any attempt at

training prior to this maturation stage is a waste of time and may develop resentment, or at least confusion, in the child.

Before outlining a training plan, the goal which the child is expected to attain must be carefully considered. An adult is expected to observe the rules of sanitation, privacy, and modesty. It is obvious that these concepts are meaningless to very young infants, and that an attempt to use these as incentives would result in failure. The *comfort* or *gratification* of the child provides a more effective goal. At about the age of twelve to fourteen months the duration of a cycle of this appetite increases in length. The interval between the acts of emptying the bladder becomes more prolonged. The child is then taken regularly to the toilet and induced to attempt to empty the bladder. He finds that, under these circumstances, he is more comfortable ; he avoids the dampness and coldness of wet garments. Any form of reward or punishment, in the form of ridicule or spanking, should be avoided, since such measures misdirect the child in crystallising his wants. He should not *want* to control the bladder action to please the parent, but to please himself. Towards the end of the training programme some vocal signal can be evoked from the child and the parent may adopt this "word." Many such words are incorporated in the local language of a family for generations. In this fashion the child, recognising the need through the sensory experiences, announces them vocally and the parent can assist in the satisfaction of the need and the gratification of the child. Later on, the adult *wants*, viz. modesty and privacy, may gradually be incorporated into the child's behaviour pattern, so that he may be adapted to social life.

Training of the control of the sphincter is complete when the child no longer wets his clothes or bed. It is

usually satisfactorily accomplished by the average child at the end of the third year. In a great many cases, through faulty training, this period is extended. The child is then said to suffer from *enuresis*. The proper treatment for such cases consists in setting up a training programme exactly as one does for younger children. Usually through faulty training, the child develops certain resentment patterns which must be enquired into and alleviated before retraining begins. In a small proportion of cases of enuresis there is a physical complication, so that an examination by a competent physician is always advisable before intensive training is undertaken in these cases.¹ (The same precaution, viz. examination of the child by a competent eye-specialist, should be taken with children who have difficulty with spelling.)

Since the amount of fluid eliminated through the kidneys is dependent upon (a) the amount of fluid eliminated through the skin and lungs, and (b) the amount ingested, it is not possible to regulate the control of this appetite as regularly as in the case of hunger. On a warm day more fluid is eliminated through the skin, on cold days the amount decreases. The kidneys are more active on cold days than warm. The child is trained to recognise the need and to satisfy it, whenever necessary, in an approved manner and place.

(b) *Elimination through the bowel*. Training of this aspect of the appetite is similar, in many respects, to the plan described above. Control of the bowel sphincter, however, may be established much earlier than in the case of the bladder. Since the ingestion of food is more or less constant, the rhythm is much more regular than in the case of the bladder function. Within the first two or three

¹ For more detailed instructions for the treatment of enuresis see Blatz and Bott, *Parents and the Pre-School Child* (Dent & Co., London, Chapter V).

months it is possible to associate defæcation with other physical rhythms such as eating and sleeping. The insertion of a suppository *per ano* corresponds closely to the normal stimulus for defæcation, i.e. increased pressure upon the internal sphincter muscles, and if used at regular periods of the day, usually shortly after a meal, and if the child is seated or held on the pot, he may be trained, within the first three to six months, to control this activity so that he avoids the discomfort of soiling his clothes.

There are wide individual differences in this function among children. The average number of evacuations is two a day, but it may vary from one in two days to three or four a day. Dietary indiscretions or prolonged illness may interrupt the training, and there may be a recession to a state of lack of control. In this training plan, also, it is well to avoid punishment or rewards.

During the first six or seven years unusual, conflicting situations may cause the child to revert to infantile patterns of behaviour. Enuresis and soiling may reappear as a transitory phase. The prevalence of enuresis among the evacuated children of this younger age in Britain is well known.¹ An analysis and alleviation of the conflict must be made before specific treatment is undertaken. Usually, the condition clears up very quickly under sympathetic guidance. Oftentimes, in a child of three or four, enuresis may reappear as a reaction to the inordinate amount of attention (in the child's judgement) paid to a new brother or sister born into the family.

4. *Rest*

Everything in nature rests ; plants, animals, even steel bridges, are said to "tire." The cycle of alternating activity and rest is universal. Rest, in the biological

¹ Cf. Susan Isaacs, *The Cambridge Evacuation Survey*, 1941 (Methuen & Co., Ltd., London, page 118) : "By far the most frequent problem was bedwetting, or enuresis."

TABLE 3

DURATION OF SLEEP OF CHILDREN

Age	No of Cases	Day Sleep		Night Sleep		Total Sleep	
		hrs	mins.	hrs.	mins.	hrs.	mins
1 month	13	4	30	10	54	15	24
2 months	20	4	17	11	27	15	44
3 "	22	3	55	11	53	15	48
4 "	24	3	35	11	29	15	04
5 "	26	3	25	11	30	14	55
6 "	26	3	17	11	22	14	39
7 "	27	3	04	11	18	14	22
8 "	27	2	48	11	25	14	13
9 "	29	2	40	11	28	14	08
10 "	28	2	23	11	22	13	45
11 "	28	2	09	11	31	13	40
12 "	28	2	03	11	27	13	30
13 "	26	2	01	11	38	13	39
14 "	29	1	56	11	41	13	37
15 "	29	1	55	11	53	13	48
16 "	24	1	44	11	45	13	29
17 "	27	1	51	11	44	13	35
18 "	27	1	41	11	46	13	27
19 "	26	1	48	11	41	13	29
20 "	29	1	48	11	27	13	15
21 "	27	1	33	11	30	13	03
22 "	25	1	44	11	31	13	15
23 "	28	1	48	11	16	13	04
24 "	28	1	46	11	25	13	11
2 years	59	1	17	11	36	12	53
3 "	50	1	06	11	23	12	29
4 "	41		42	11	19	12	01
5 "	54		15	11	13	11	28
6 "	70		06	11	05	11	11
7 "	87		01	10	46	10	47
8 "	50		01	10	45	10	46
9 "	63			10	32	10	32
10 "	72			10	18	10	18
11 "	68			10	09	10	09
12 "	77			9	53	9	53
13 "	52			9	40	9	40
14 "	38			9	23	9	23
15-16 "	16			9	10	9	10

world, is thought of as relaxation. Relaxation, especially in the higher species, is accomplished either awake or asleep. Too much emphasis has been placed upon sleep as the *only* form of relaxation, so that many human beings have never learned the skill of relaxing while awake.

Sleep is imperative. It is an ideal form of relaxation and is innate. A young child sleeps longer than an adult. An infant at birth seems to sleep for sixteen¹ hours or so out of the twenty-four, gradually sleeping less until at two years he sleeps for about thirteen hours daily. As a matter of fact, there are no data indicating how much sleep a person *needs*, but observation may reveal how long the average person actually sleeps. Perhaps the amount of relaxation is the deciding factor. An adult sleeps, on the average, only eight hours, but if, during the other sixteen, he never relaxes, ill-effects will certainly follow. (The unpleasant after-effects of being bombed are due to the inability of most persons to sleep *or to relax* during the raid.)

Each organ of the body has an established rhythm of relaxation, the heart, the lungs, the glands, etc. These rhythms are not synchronous with the total body rhythm, but undoubtedly contribute to it. As the child matures, he needs less sleep, or at least the need appears to become less imperative. At first little attention is paid to the establishment of a rhythm; the child is awakened at intervals to be fed and bathed, for the remainder of the time he can do as he likes. The cycle of sleep is apparently of much shorter duration than formerly noted. The normal healthy infant does not sleep through the whole period during which he lies quietly. Apparently he awakens, dozes, sleeps, turns over, and wakens again, but so long as he is quiet we think (or hope) he sleeps. As he grows

¹ Cf. Table 3, taken from Chart, Nellie I., Institute of Child Study pamphlet, University of Toronto, 8, 1940.

older he must fit into an arbitrary scheme of "hours" and must do his sleeping when he is not expected to be doing more important things—important, that is, from the point of view of society, such as earning his living. And so we must train him to do all his sleeping at one time, preferably at night. But this is the final stage of the training programme. In early infancy we "care" for him at regular times and let him sleep during the intervals. Later we regulate his sleeping periods, one each in the morning, afternoon, and at night. After he learns to walk, and hence is more active, he learns to sleep only twice a day, namely, for a short interval after his noon meal, called afternoon rest, and at night. Many adults have discovered that afternoon rest is as salutary as well as a gratifying experience. Some countries approve of the custom. "Anglo-Saxons" look upon an individual who rests in the afternoon as lazy; they are afraid that someone will get ahead of them in their business or profession. It is not to be wondered at that children soon learn to look upon the afternoon rest as a sign of immaturity and seek to grow up by refusing to co-operate. They think they will miss something by resting.

It is a well-known fact that one cannot force a child to sleep. (No more than one can force oneself.) One may be able to force food down a child's throat, but sleep cannot be forced upon him. One can only arrange conditions that induce sleep and then leave the child alone. A comfortable, recumbent position, relative quiet, darkness, warmth and fresh air, and the feeling of safety and security, under these conditions the child will go to sleep when the need is manifest. The adult is responsible for arranging such conditions. Regular and consistent times for relaxation are most important. As with hunger, the physiological functions fall into a regular sequence under consistent training.

It is also most important to train the child to relax, when awake. This can be accomplished by arranging the environment to permit two kinds of activity, vigorous, boisterous, and uninhibited effort on the one hand and quiet, uninterrupted, and sedentary activity on the other. This arrangement will be treated in more detail in the discussion of the "appetite of change," but it may be pointed out here that, in order to learn to relax, a child must have an opportunity, in a serene atmosphere, to discover that vigorous activity is more enjoyable when alternating with periods of quiet contemplation.

The importance of privacy, of being alone, of doing things alone, of being able to work in a group but not of a group, is just as important as developing what is commonly called co-operation and socialised activity. The ability to desist for a time from the pressure of self-imposed tasks, to relax mentally as well as physically, by changing the content and goal of thinking, requires a long period of training. Some people never acquire this skill.

5. *Change.*

The appetite of change "demands" satisfaction in the form of new perceptual or ideational imaginative content of consciousness. The senses of man are like scouts sent out beyond the main body to learn what is going on in the world about them. It is only through these scouts that information can be obtained. Messages are sent back to headquarters, where they are scrutinised and classified, some for immediate action and some for later consideration. These messages come in continuously, day and night, through the various senses, the eyes, the ears, the nose, the mouth, and the skin, and are carried by the nerves to headquarters. Millions of "messages" arrive every moment. Obviously there must be some sorting mechanism, otherwise there would be utter con-

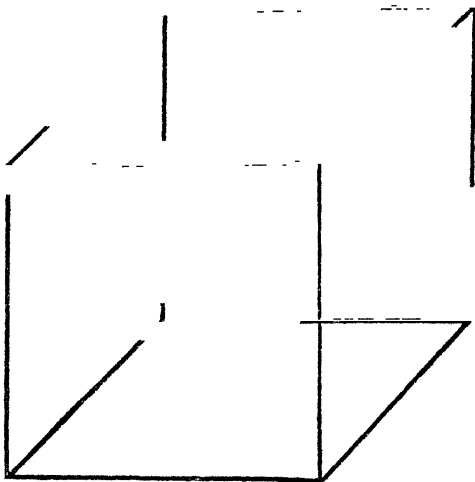
fusion. Some messages are immediately important, e.g. stubbing one's toe requires immediate adjustment of equilibrium ; others are important because of their future reference, e.g. a strange word, seen in the paper, must be looked up in a dictionary. Not all of them can be dealt with at one time, but there is always one message that is most significant, one that must be acted upon at once. The arrangement for selecting messages according to their immediate significance is called *attention*.

The act of attending to one and excluding other messages is instinctive. We may think of the mind as a convex lens continuously changing its direction and focussing first upon one and then upon another aspect of experience. (Again, we must warn against pushing such a simile too far ; the mind certainly does not act as a magnifying-glass.) Just as it would be inefficient for the Officer Commanding a unit to concentrate too long upon any single message, because subsequent messages awaiting action would pile up, so we find that an individual cannot attend to any one message for too long a time. There is a nicely adjusted mechanism which provides that any message which is attended to for longer than the allotted time begins to lose its powers of holding the attention. This mechanism is called *adaptation*, and is the physiological basis of the appetite of change. Many examples may be cited, e.g. one soon becomes accustomed to odours and to the touch of one's clothes on the skin, to the sound of a ticking clock, etc. Adaptation is a very fortunate circumstance, because otherwise one might fix one's attention on one thing and remain for life in a stupor.

By means of the act of attending there is a continuous change from one experience to another, each of which moves into the focus of attention and is doomed, by that very fact, to be pushed out by its successor. It is im-

possible for anyone to keep in the mind, for any length of time, the immediate present. A glance at this figure, called a reversible perspective, illustrates this phenomenon. There are two (at least) aspects of this box. It may be seen in three dimensions in two perspectives. Once one has seen both, it is impossible to maintain *one* aspect because the other "moves in."

A child is born capable of attending. Perceptions of the world follow upon each other at a rate corresponding to the child's reaction time. To the



casual observer the "mind" appears to act instantaneously, but we know now that the "mind" does not act as quickly as light, which travels at the rate of 186,000 miles a second, nor as fast as sound, which travels 1,000 feet a second. For an individual to receive a message, interpret it, and act upon it takes from a tenth to half a second in time. This is called "reaction time." We have reason to believe that there is wide variation in the speed of reaction time among individuals. Attention is only *one* aspect of the reaction, as will be seen below. The child is continually experiencing new situations, since a change in his conscious content is compulsory. He becomes *bored* with

the old and seeks the new. The demand for the new, the factor which satisfies the appetite of change, is known to an adult as "boredom" or "ennui."

To return to our simile, every message that arrives through the senses must go to headquarters and be dealt with in some way. It may be filed away by some junior clerk and never reach the "top," or it may be in the focus of attention, in which case it is the most important factor in determining immediate action. The action or response is made by the individual in terms of the "significance" of the message. The individual interprets the sensory data in terms of the "use" which he will make of the information in achieving the goal momentarily in mind. The *use* may be called the meaning, which involves the sense-message, the interpretation, and the response. The meaning of anything is the use to which it is put by the individual in terms of his wants and needs of the moment. After the response the whole incident is filed away, to be called forth again when a similar situation arises. As the experiences multiply and some responses improve in efficiency, meaning grows and develops. Meaning is a term applied only to conscious activity. Meaning resides in the individual, never in the objects, since objects can have no meanings *per se*.

If one could see inside the child's "mind," perhaps one would find that it resembles the experience of sitting in a slowly moving railway-train, looking out of the window, watching the world go by. As long as there were a change of view rapid enough to prevent total adaptation, the appetite of change would be satisfied. If the train were suddenly to give a jolt, the contemplation of the changing view would be interrupted and the attention would be directed to this interfering experience. At any time the stream of consciousness may be interrupted by sensory messages which are sudden or intense. Intense

sounds, sights, smells, or pain intrude on the mind imperatively and demand an immediate response of some sort. This is a very useful arrangement, because usually such "urgent" messages are important.

In early infancy, then, one may observe the child paying attention, at all times, under two controlling influences,—firstly, adaptation, because of which change must take place, and secondly, the imperative nature of some messages, which interrupts the flow controlled by the first. Both these influences are operative at birth. But not all so-called "stimuli" can affect the consciousness of the infant, due to the lag in the maturity of his sense organs.¹ As a child grows up he becomes "sensitive" to more varied sensory data.

The next development in attentive activity is very complex. One must assume that every message that comes in is either used immediately or filed away. All remain in a more or less active permanent file. Some may never be taken out again, in a deliberate way, to be reviewed, but the idle files are not destroyed when their usefulness is apparently done. So, as a child grows up, his mental filing cabinets increase in number and the cross-indexing becomes more intricate. A message arrives and is immediately referred to a particular file, often to the wrong one. The child may recognise the message as something that he has seen before. He wonders, "What did I do with this the last time?" He may go back to the file and check. This procedure, of course, takes time. In the meantime other messages are coming in, but as he is "busy" with the first message, it appears to the observer as if the child is still "paying attention" to the message that arrived two or three seconds ago. As a matter of fact he is

¹ Cf. Koffka, *The Growth of the Mind: an Introduction to Child Psychology* (Harcourt, Brace & Co., New York).

paying attention, not to that message,¹ but to the re-arranging of his files and the consideration² of his responses. During this period he is occupied with³ this complex of mental activities. Thus we may say⁴ that he is *concentrating*. He has placed the responsibility for looking after current affairs on a lower executive while he deals with this enduring situation.

Another simile may be used. When a child is old enough to hold a rattle placed in his hand, he feels his fingers close about it (kinæsthesia). It is cold (temperature) and hard (touch and tendon); he feels the weight (muscle and tendon); he hears the sound (auditory) of the pebble rattling about inside it; he puts it in his mouth and feels its smoothness (touch, and perhaps taste). Day after day he receives the same messages concerning his "rattle" experiences, although not necessarily in the same order. They are all filed away, and then, this being an active file, when he feels the cold hardness in his fist, he can predict, through imaging, that if he moves his arm he will hear a sound. By this time he has cross-indexed all these messages. Furthermore, his mother has said "rattle" so many times that this sound complex, too, is included in the file, and later on the name of the file will be "rattle" and all of his related experiences will be included in it.

Let us watch a child of three or four months of age. He holds the rattle, shakes it, looks in the direction of the sound (he is attending now to the sound), his hand stops, then inadvertently it moves sideways, out of sight. Again the rattle sounds and again his head and eyes move in that direction. We may say offhand, "He is paying attention to the rattle," but from the discussion above we deduce that he is paying attention to *successive* sensory messages that are centred in a stable experience. The rattle remains cold, hard, smooth, and if moved will

make a sound, and the stability of these conditions makes it possible for the child to combine his unit experiences into a more or less accurate and consistent common experience. When the child is engaged in the activity, we say that he is *interested*. Interest grows through experience and is partly based on the fundamental capacity to file the present experiences so that they may be used in the future (memory). (One never lives in the past, but always in the future.)

The *new* attracts attention. But the individual must contribute something more to the situation than mere attending, if a series of attentive acts is to be united into what appears to him a common group-experience. Thus, an individual attends to the "new" or the "sudden," but he is *interested* only when, through his own actions, he has combined a series of acts into a unitary experience. The child develops *interest* in those aspects of his experience which, through his own efforts, he has learned to link together into a common whole.

The child attends to the "new" and to the "sudden" from birth, but if he remained at this infantile level he would never learn. The capacity to link up experiences, viz. the development of interest, is essential to the development of intelligent behaviour. Interest is aroused through learning. The interest depends upon an *activity* of the child; a "thing" cannot in itself be interesting. The teacher may say, "We like to see the child concentrating," "We like to see the child interested." Unless she understands this mechanism fully she is often discouraged.

A child attending to each new experience as it arises is gratified through no effort on his part. The appetite of change is functioning and is satisfied. The child, at first, is "curious," not "interested." It requires nothing but a novel situation to arouse curiosity; interest

develops only through experience and effort. Curiosity may give the initial push, but only when interest is developed can there be sustained effort. Unless there is effort the individual soon exhausts the possibilities of new sensory experiences. A child soon loses interest in the rattle if he has not learned to shake it *himself* and thereby produce the noise. His effort becomes part and parcel of his experience. Instead of the world changing before him, he has brought about the change by the use of his own response patterns. The identification of his active contribution with the total situation is the fundamental basis of the development of interest.

By manipulating the materials of the world a child, through his own efforts, manufactures something new. This new arrangement satisfies the appetite of change and hence is a stimulus to further effort. Thus interest grows upon itself. (It must be emphasised that the interest is in the individual, not in the thing.) Interest is the conscious experience that accompanies effort; the more effort expended, the more skilful the response; the more skilful the response, the more novel the changes which are brought about and hence the greater the satisfaction of the appetite of change. At first the child can change the shape of a piece of plasticine but slightly, but through effort he becomes more skilful, he can then mould the plasticine into bars and blocks and spheres, etc., and later, through his experience, he can make marbles and snakes and eggs and baskets and cannons. A child is more interested in using his own skill to make things than he is in observing the product of another's skilful efforts, unless, through social pressure, he has learned that the products of his skill have been given an artificial social value. He may then no longer remain interested in his own handicraft, because it compares unfavourably with that of others more skilful. He becomes content then "to let George do it."

The development of these social attitudes will be discussed in a later chapter.

Because interest develops only through effort, it is important never to do anything for a child which he can do for himself. Furthermore, the emphasis in teaching should always be placed upon the expenditure of *effort* rather than upon the excellence, or otherwise, of the *result*.

Time is another important factor, for the development of interest. A single moment¹ of consciousness is relatively short. A *series* of successive moments combined into a common experience, directed towards the accomplishment of a goal, endures for an appreciable period of time. Such a period of time is called the "span of attention." A child attempting to bite a piece out of an orange may spend two or three minutes at this one task. While he is devoting his time to this self-selected activity he is oblivious of other changes that go on about him. Thus interest in one task prevents, for the time being, activity in other fields. While the child is developing one skill, he must neglect others.

The span of attention, or the time that a child spends at a unified task, increases gradually with training. In young children this span is short ; at two to three years of age the span is roughly four or five minutes, at four to five years it may be ten minutes. Later on, one may intermittently spend years on one task. It is perhaps a salutary condition that the span is short in childhood, because by changing the activity and hence the direction of interest a child gains many experiences which would be inhibited if the span were of long duration.

During infancy, a child should be surrounded with a

¹ A *moment* of consciousness is here used in its pedagogical sense. Consciousness is continuous, and only for purposes of description can one consider consciousness as a series of discrete "moments."

variety of media which he can change through his own efforts. The media should be adjusted to the degree of his skill of manipulation. A variety of materials is essential, so that when his interest is temporarily exhausted, because the limits of his skill limit the amount of change he can produce, he can change to another activity and apply himself, through using another skill and a new material, with continued zest.

It is unfortunate that it is so easy for an adult to entertain a child for a short time. Any adult, because of the many experiences which he has had compared with a child, can, by mere recital, command a child's attention for a short time. In many homes the entertainment of children by adults works so well and appears so gratifying that the child becomes discouraged at the results of his own meagre skills, and demands, more and more, the excitement of the novelty arranged by others. He becomes bored with his own activities and makes more and greater demands upon his parents for entertainment.

The most common complaint made by teachers of children in the upper grades is that the children show "lack of interest." Nothing in the world is interesting in and of itself. No one phenomenon is intrinsically more interesting than another since the interest is a contribution of the individual. When a child finds that his skill is not equal to the creation of new experiences within any field, his interest lags. If he is forced to spend time and effort upon meaningless results, his interest lags further, he is more and more reluctant to put forth effort. A school child is always uninterested in those subjects in which he is poorest in accomplishment. He spends most of his time on the subjects in which he is most skilled and hence most interested, to the exclusion of other potential interests which suffer thereby.

To sum up, the appetite of change demands new experiences. The child is born capable of attending in two ways, (a) to any new or novel arrangements of the universe, and (b) to any sudden or intense stimulus. He must *learn* to attend to a series of events which, through his efforts, he combines into a meaningful whole. Effort induces skill, skill brings about a change, and thus "interest" develops.

In order to foster the development of interest, the child must be left free to experiment in a world of materials which he can change, through his own efforts, towards a meaningful goal.

6. *Work and Play*

The terms "work" and "play" are used very commonly in everyday life. What is the difference between work and play? Is work monotonous and play interesting? Is work enforced and play free? Is work burdensome and play light-hearted? Is work unpleasant and play pleasant? The answer to all these questions is "yes *and* no." To be sure, sometimes work is monotonous, so also is play, e.g. practising putting; play is exciting and novel, but so is prospecting; work is compulsory, but often so is play at some schools. None of these criteria differentiate play from work. Play is no more relaxing than work. It is just as enjoyable to change from work to play as the reverse. One is forced to the conclusion that there is no difference between work and play except that one is paid for work but not for play. Psychologically there is no difference, both of them are activities. (See Chapter XI.)

A child is born active, and we are interested in fostering the development of his span of attention and inculcating some abiding interests. Whether, later in life, he can exchange the fruits of one or more of his skills for wages,

or in barter for the fruits of the skills of others, is a matter of economics. By the sweat of his face shall he earn his daily bread, but the child should learn that he may perspire freely and expect no other return than the gratification of a task well done.

It was formerly thought that play was an innate pattern in children, that children played instinctively, but that they had to be taught to work. We know now that this is a false doctrine. Children are born active and remain more or less active throughout life. They must do something at all times. Teachers and parents must arrange for the development of abiding interests in children. The activity of a child may be as industrious, time-consuming, arduous, and discouraging as the so-called work of his father or mother ; on the other hand, it may be as thrilling, satisfying, productive, and fascinating.

Effort is always tiring, so that after a period of activity there is need for rest and relaxation. In addition to boredom, the onset of fatigue intervenes and determines the duration of the span of attention. Children tire more quickly than older people, largely because through lack of skill they expend more energy per unit of production than a skilled person. Consider the amount of energy expended by the beginner in learning to swim. He thrashes out in all directions and spends enough energy to take him across the tank, but after propelling himself through the water a distance of about three feet, he is utterly exhausted. Later, when he has learned to swim efficiently, he also swims " tirelessly." And so a young child, because his skill produces relatively little change and because he tires easily, shows a relatively short span of attention. Even children of seven and eight soon become tired of the rules of a game, because they are usually restrictive, and change them.

The expression " A change is as good as a rest " is, of

course, inaccurate.¹ If the child is bored, he should change his occupation ; if he is tired, he should relax ; if he is both bored *and* tired, he should be entertained until he falls asleep. One might just as pertinently say, " A meal is as good as a rest."

When teaching a child, each task expected of him, whether it be washing his hands, tying his shoes, rearranging a peg-board, painting a picture, eating his spinach, resting in bed, or listening to a story, should be considered from the point of view of developing interest. A child does not discriminate between the ultimate economic or moral values of activities, but only between the " interest " values. It is possible, through intelligent guidance, to develop an *interested* child. Since interest depends on effort, the intelligent child is interested in *more* activities than the unintelligent, but the gratification may be equal in both types of child, unless, of course, we try to set the same standard of achievement for both. The intelligent child may be bored if the standard be set too low, and the unintelligent discouraged if the standard be too high. When we place arbitrary and false values upon performance, we produce the disinterested, discouraged, ambitionless, lazy child.

In a later chapter we will discuss the development of interest in the manipulation of past experiences. Such interest, developed through effort expended upon ideas rather than things, is commonly called " imagination."

7. Sex.

The inclusion of the many and various human behaviour patterns subsumed under the heading

¹ During the August Bank Holiday of 1943, the people of Britain decided they " needed " a change. In spite of the discomfort of crowded trains, crowded quarters, crowded restaurants, they moved from their homes to—anywhere else. After three years of concentrated war effort, a rest was not satisfying ; they sought a change.

"sexual" as appetitive in origin, may require more detailed discussion than those of hunger, because "sex," usually qualified by the phrase "in its broadest aspects," has been given a peculiar emphasis in modern civilisation. Many modern novelists and poets and some schools of professional psychologists have considered sex the fountain-head of human motivation. The classification of objects or events under any system of headings depends upon the characteristics of the "thing" to be classified. Reference to Chart 3 indicates that "sex" manifests all the characteristics of the other five appetites. It depends upon a physiological functioning group of organs; it may be satisfied by an instinctive response—manipulation; a specific conscious experience is peculiar to its functioning; there is a definite cycle of urgency and repletion; maturation is patently manifested; and the modification of the instinctive response pattern under the influence of social restrictions and individual enjoyment, although exceedingly complex, may be readily observed and analysed.

Thus sex, as one of the six appetites, must be considered by the parent and teacher in the same fashion as hunger. The child must be guided during his attempts to resolve the same conflict, viz. between conformity and non-conformity. The responsibility for such guidance rests upon the adult who is in charge of his training.

The appetite of sex is last on the list for three reasons: (1) it is the latest to reach full maturity; (2) it is least significant from the point of view of the biological survival of the individual¹; and (3) the social restrictions, perhaps because of (2), are more in evidence than with the other appetites. The corollary of (2) is that a training programme in connection with this appetite is

¹ The individual becomes interested in the survival of the race much later in life (if at all).

more frequently neglected than in the case of the others.

In considering the physiology of this appetite one must not consider the possibilities of satisfaction as confined to stimulation of the reproductive organs themselves, because, in addition to these, there are related structures which have sexual significance, for example, the nipples. Such sensitive areas are called erogenous zones and are important psychologically because they possess sensory endings which may be stimulated and are included among the potentially conscious components of this appetite.

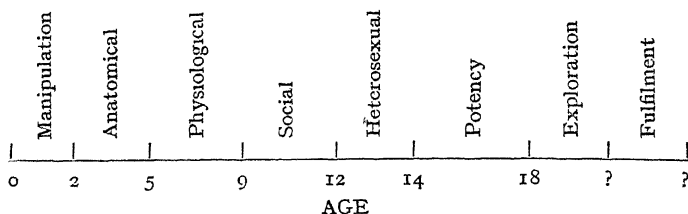
It is mistakenly assumed that maturation in connection with this appetite is quiescent for the first ten or twelve years and then suddenly becomes active. A child, at birth, has already matured to some degree and maturation continues gradually for some time before it accelerates at puberty. The early response pattern is some form of manipulation of the erogenous zones. Sensory experience attendant upon this activity is apparent in very young children. The child explores the whole proximate universe of which his own body is a part. Inadvisable methods of calling attention to special parts of the body, by some form of inhibition, will heighten his curiosity. Slapping a child's hands in the bath if he should touch his genitals increases the want for further exploration.

During the period of pubertal change, already discussed, physiological and anatomical maturation takes place. At about this time the instinctive response of coitus may be manifested.

As in the case of the other appetites, an effective plan of training may be suggested. The criticism of child-rearing in the past is not that the plan of training for this appetite has been inept, but rather that it has been absent altogether. A child has been expected to develop

approved attitudes towards this important appetite in a haphazard "training school." If parents were to spend only a portion of the time which they use in training their child to eat with a knife and fork in teaching him about sex, many of the problems of later life could be avoided.

PLAN 2



Since we are primarily concerned, in this book, with younger children, we cannot discuss a comprehensive programme for sex education. There are certain safeguards, however, which must be taken in infancy, the implications of which are significant for older children and adults. Plan 2, above, suggests roughly the developmental stages in the average child. The stages obviously overlap, but some such plan is necessary for the discussion of an educative procedure.

The cultural requirements in connection with this appetite are complicated in two ways. (1) An arbitrary social pattern separates the life of an individual into two parts—pre-marital and post-marital. In general, the social requirements are the same in both, namely, modesty and reticence, but in the pre-marital stage continence is expected, whereas in the post-marital, satisfaction of this appetite is socially approved. Such a circumstance complicates the training programme, because the individual is denied the practice of the satisfaction of this appetite during the period of training. This difficulty may be

partly overcome if the " teacher " recognises this circumstance and introduces a plan of *honest* education.

In many homes it has been considered adequate to take the youth aside some time during puberty and give him a few rules and regulations, much to the embarrassment of both parties. Sometimes it is arranged that the father should " speak to " the sons, while the mother enlightens the daughters. The inadequacy of such a programme is apparent when one knows that, by this age, children have already acquired not only knowledge, but also some experience of this appetite, often of an unsavoury character.

A plan of education, to be effective, must begin at birth. Cleanliness prevents undue irritation of sensitive zones. Exploration should be looked upon as a normal procedure and no apprehension should be shown by the parent toward this activity. Later on, the external world proves more fascinating than the body, which becomes familiar, and this phase is passed through.

During the pre-school years the child usually becomes interested in the anatomical differences between the sexes. If this curiosity is allayed by accurate knowledge, the attention of the child does not remain fixed upon this phenomenon. Such anatomical facts are best learned in the home, where the opportunities for anatomical research are more readily provided. Towards the end of this period the child becomes interested in physiology, e.g. the physiology of birth. Opportunities may be readily provided for satisfying this phase of interest. The care of pets and frank discussion of their processes of reproduction give a child a background of knowledge. The pregnancy of the mother provides an opportunity for further enlightenment. It is not necessary to give a full obstetrical account of the birth mechanism, nor to give a lecture on embryology, but most children cannot be

"put off" by the mythology of storks, bulrushes, and cabbage patches.

In the next phase the individual becomes interested in the social implications of this appetite. He may hear rather dubious stories and vivid anecdotes, which, usually, he does not fully understand. During this phase a clear and full discussion of reproduction is desirable. Too often this knowledge is imparted by means of discussions about reproduction in plants and animals and the pattern in humans is left to the child's imagination. The next phase coincides with the physiological changes which take place during that period. Children become interested in the opposite sex as a means of gratifying the want rather than satisfying the need. After which, the child becomes a sexually potent member of society, usually between fourteen and sixteen years of age.

To all intents and purposes he is biologically an adult. During this phase and for as long as it continues, the restrictions of social custom are most insistent. The phase of social exploration, or seeking a mate, the duration of which is determined by economic factors in the community rather than by biological factors in the individual, is usually fraught with many conflicts. Finally, the post-marital pattern, inevitably influenced by the individual's previous history, may or may not be satisfactory either to the individual or to society.

In a programme of sex-education the parental and the State responsibilities are clearly divided. The writer is of the opinion that sex-education, up to adolescence, is a parental responsibility, nor should any parent wish to delegate this responsibility to someone else. Because of social custom, we have considered this appetite a far more intimate experience than any of the others. The parents, throughout the first decade and a half of the child's life, can suggest through honest and dignified

explanations and discussions with the child that sex is an experience, intimate in character, but not necessarily secret. They must conduct an educational performance which extends intermittently over the whole period of childhood. The child's curiosity determines the periodicity of the plan. If a child learns, early in life, that the parents are willing and anxious to discuss with him sex matters about which he is puzzled, a relationship of confidence and respect is engendered between child and parent more easily than in connection with the other appetites. Of course, knowledge is more easily imparted in the classroom, by a teacher, but the parents should be jealous of the relationship between themselves and the child and be loath to depute the task, lest the opportunity for developing mutual confidence, respect, and dignity should be lost.

The State bears the responsibility for arranging adequate facilities for children to sublimate the demands of this appetite during the period which extends from the onset of puberty to marriage. Recognising the necessity for continence, chastity, decency, and modesty, there should be no pretence that this appetite is dormant. It is not dormant; it must necessarily be controlled. It may be sublimated, however, if the youth of this age are permitted to enjoy approved activities within the limits of social custom.

The first requirement is that boys and girls of this age should not be separated artificially. Today we recognise that the educational programme of both sexes is almost identical. No longer do we expect girls to sit in cloisters and embroider; no longer are the arts, professions, or crafts exclusive privileges of the male.¹ Co-

¹ There is general misunderstanding about the nature of masculine and feminine characteristics. Miss A. Adams demonstrated by a study of young children at the Institute of Child Study, Toronto, that, up to the age of four years, both boys and girls played equally with dolls. After this age the boys began to shy off doll-playing.

education is the first requirement for adequate sublimation.

Secondly, by providing ample opportunity for satisfying the appetite of change in a co-educational situation, without absurd restrictions, the youth may find it easier to conform to the social demands with reference to the appetite of sex. Dancing, drama, sports, hiking, group singing, a community house, and privacy should be provided for youth. After all, this is a period of exploration ; it is a period of courting, and opportunity should be provided for this activity to be carried on in a respectable and dignified manner. Only through some comprehensive plan, such as this, can ultimate adjustment to married life be safeguarded.

This appetite is by no means the most important for the maintenance of a healthy personality. In fact, the appetite of change is more important. But through lack of education, lack of confidence in youth, and unhealthy restrictions, the problems with reference to this appetite loom large. It is a distortion of facts to make this appetite the be-all and end-all of human existence.

SECTION 3. THE ATTITUDES

During the early part of this century psychologists were still slavishly following the contemporary methods of related fields of the Natural Sciences—Chemistry, Botany, Anatomy, and Physiology. The emphasis upon form and its analysis dominated the study of consciousness. To

Miss Adams showed from her home investigations that this tendency was due to social pressure, mainly exerted by the fathers, who "kidded" their sons when seen with a doll. "Don't be a sissy," they admonished. Many so-called sex-differences are due to social influences and are not biologically conditioned. What maiden of today would wish to behave like her mid-Victorian, swooning, fluttering, timid counterpart? There are undoubtedly, sex-differences, but nearly all social differences between the sexes are "acquired" through convention and tradition.

reduce the complex into simple elements was considered the function¹ of the student. Sensation, feeling-tone, conation, cognition, etc., these were the unitary "stuffs" which, combined, were supposed to explain human consciousness. A remnant of this idea still persists in psychological thinking. Feeling, acting, and sensing are often considered distinct phenomena.

The physicist has succeeded in reducing all phenomena under his scrutiny to some form of energy; he has discarded "mass," considering it merely another manifestation of energy. In the same fashion the psychologist today looks for a common principle. "Activity" is the obvious correlating concept. Activity may be observed and dissected and its many aspects may be isolated and described. The "feeling-tone" of Wundtian invention, as first enunciated, has ceased to have any useful meaning. There is no special "feeling" activity of consciousness apart from thinking. An individual says, "The apple is sweet." The sweetness is tasted, hence sensory. He says further, "The sweetness is pleasant." Formerly it was thought that the "pleasantness" was a distinct element of consciousness, separate from the sweetness, and, added to it, helped to build up the total perception of "apple." At the present time it is assumed that the process of thought is much more than the mere building up or combining of elements into a more complex whole. The whole is greater than the sum of its parts.¹

Undoubtedly an individual "evaluates" his sensory experiences. His judgement is built upon past experience, the immediate, motivating circumstances and the consequences following upon the ensuing response. He acts,

¹ The Gestalt school has contributed a great deal towards a clearer understanding of "perception." Paradoxically, the concept becomes more concise by emphasising its complexity. The student is advised to read—Koffka, K., *The Growth of the Mind: an Introduction to Child Psychology* (Harcourt, Brace & Co., New York).

and interprets his action at the same time. Just as he learns, later, to call the round, orange-colored, sweetish, softish, eatable, throwable group of experiences an "orange," he also learns to add the term "pleasant." The naming of an experience "pleasant" does not mean that the "pleasantness" exists apart from the experience. The whole experience must be analysed in order to discover what factor determines the individual's choice of "pleasant" and "unpleasant" as a symbol for evaluating different experiences. When he classifies objects as "pleasant" or "unpleasant," he has developed an *attitude* towards them.

Attitudes are acquired by the individual. They are built up on a basis of inherited response patterns. A system of "tastes" is developed which constitutes the cultural and æsthetic experiences of the individual. It is significant that "taste," as a word, is applied to both the sensation of taste (i.e. sweetness) and the attitudes, namely, "Jones has good taste" (i.e. in clothes).

Individuality of taste is the most striking characteristic of human beings. One likes strawberries, the other pickles. One likes Bach, the other Gershwin. One likes Superman, the other Popeye. One likes a Chevrolet, the other a Ford, and some dislike—or like—they all. On the other hand, human beings have a great many tastes in common, but no one individual has an identical taste-pattern with another.

We must now discuss the origin of tastes. The world into which the child is born is full of change. These changes affect the human sense organs in such a fashion as to induce a response. Man is not just a machine like a juke-box,¹ which plays a selected tune when a coin is

¹ A "juke-box" is a mechanical device into which a coin may be placed into a slot corresponding to a gramophone record, which is then automatically played.

deposited in the slot. Conscious man takes the stuff arising out of sensing and moulds it to his own use. A reaction on the part of the individual, a response of some kind, is the inevitable result. During the moulding process he interprets the situation in terms of his own needs, wants, abilities, etc.

The responses of a very young child may be classified into two types—the child responds positively or negatively to everything that comes within his sensory ken. A young infant responds *positively* to the milk from his mother's breast ; he responds, in part, to a slightly salty taste, a warm temperature, and a smooth touch. The same child responds *negatively* to pain, hot and cold, sudden bright lights, and loud sounds. One would misinterpret the situation in assuming that the child *likes* the milk or *dislikes* the cold. Such assumptions are "read into" the situation by the adult in the light of his own experiences.

Dependent upon this innate response pattern, a child learns to classify his experiences. He responds positively to certain situations, and these situations are different from those to which, or rather *in* which, he responds negatively. Later on, as his perceptual experience broadens, he will attach to certain parts of the environment a particular significance. He will select a portion of the world about him and name it an "object" of perception, viz. "orange," "table," "lamp." To these objects he will attach not only sensory significance, but he will classify them into objects towards which he reacts in a "positive" and "negative" manner. He will hear his parents applying to some things the terms "nice" or "nasty," just as they call certain objects "oranges," "tables," and "lamps." He will hear them say, "I *like* that picture," or "I *dislike* this spinach." He will fall into the same error of projecting the origin of his responses

into the outside world. He will conclude that things outside have peculiar characteristics, because he has a name for them. Objects take on the characteristic of "niceness" or "nastiness." He will conclude that he likes or dislikes things *because* they are pleasant or unpleasant. As a matter of fact, the mechanism functions exactly oppositely; the sequence is unequivocal, he responds positively and concludes that the object is pleasant, or he responds negatively and concludes that the object is unpleasant.

"Pleasantness" and "unpleasantness" are not characteristics of the object nor do they exist as separate entities at all. They are symbols employed to distinguish between two distinct response patterns which are independent of the *kind* of object and only partly dependent upon the sense-stimulating characteristic of the object. Strawberries are not eaten because one likes them, but *one likes them because one eats them*. Another person, responding differently, says, "I can't eat strawberries because I don't like them"; actually he *does not like them* (the same strawberries) *because he will not eat them*. Thus, pleasantness (or likeability) cannot be *in* the strawberries, nor can pleasantness be something which the individual "attaches" to an object, but, rather, it is a symbol which he uses to describe the exceedingly complex experience arising out of a positive response.

Chart 2 indicates the sequence of events. A positive response is indicated by the behaviour of the child. He makes an effort to approach the object and, if successful, accepts and holds on to it. He later says, "I want it," then "I like it," and finally, "It's nice." The negative response in the same fashion is indicated by withdrawal, rejection, or dismissal. He will say, "I don't want it; take it away," then "I dislike it," and finally, "It's not nice." Casual scrutiny of oneself and one's friends

CHART 2

The Development of Attitudes

Attitudes	positive	{ approach accept- ance }	liking	{ pleasant nice beautiful }
	negative	{ with- drawal rejection }	dislik- ing	{ unpleasant nasty ugly }

demonstrates the truth of this sequence. If "likes" and "dislikes" were determined by the characteristics of an object, then *all* things would be either nice or not-nice, and, furthermore, we should *all* like the nice things and dislike the not-nice things. Again, if things were either nice or not-nice, it would be very difficult to explain how one changes one's mind and decides that a thing is nice one day and not so nice the next.

In Chapter III a description was given of the early conscious life of the child, who is born conscious but without conscious past experiences. He is capable, at birth, of responding in one of two ways to his environment, and it is important that he should do so ; to respond positively to food and negatively to pain assures him of survival. During the first years of his life he will meet with many new and novel situations : he will view the whole series of spectral colours ; hear all the tones from bass to treble ; taste sweet, sour, bitter, and salt ; and so with all the other senses, provided, of course, that environmental opportunity is afforded him to experience such things. To each new experience he *must* respond, and he must respond either *positively* or *negatively*, so that, during this early period, he classifies all his experiences into one or other group. His classification is based upon his own

individual effort in each case. Because of the paucity of his experiences his responses will be simple, uncritical, and clear-cut. His "likes" and "dislikes" at this age are decisive; later, as the situations call forth more complete interpretation, his classification becomes more subtle and relatively stable. The nuances of more mature cultural life may appear after further experience and maturity.

Up to this point the discussion has been over-simplified for purposes of greater clarity. At every moment of experience there is not only a single sensory experience, but, rather, every moment of life is filled with a jumble of sensory impacts. This jumble would be confusion indeed if it were not for the phenomenon of attention. Attention has been described above as the innate selective aspect of consciousness. By means of attention, a child selects from the immediate jumble a small group to which he attends and which thereby attains a peculiar ascendancy over the other immediate sensory constituents of consciousness. This group becomes the "object" of attention. The object selected may be a pin-point or a mountain, depending upon the child's motivation of the moment, but the object is always embedded in the total background of his immediate experience. The background is just as important as the object, because the response to the object is always determined, in part, by the background of the past, present, and future. A child's response towards an ice-cream cone in his own hand may differ from that towards the ice-cream cone in another boy's hand. The ice-cream cone in his own hand is "approached," he accepts it, he *eats* it. He says it is "nice," that "he likes it." He sees an ice-cream cone in his chum's hand. He approaches (reaches for) it, but it is withdrawn by the boy. He interprets the "boy" as the object of his frustration; he "rejects" the boy, or

attempts to. He says, " I don't like you." This situation is part approach (to the cone) and part " withdrawal " (from the boy). Both efforts are unsuccessful, and there is further frustration. (This situation is the starting-point of an emotion · see Section 4 of this chapter.) If the child attacks the boy (approach response) and confiscates the cone, he is not only pleased, but elated. If he decides that discretion is the better part of valour and departs (withdrawal response), he is displeased and disgruntled. He may then project the attitude on the boy, who has become an " unpleasant, unlikeable " boy. A negative attitude may become partly attached to the cone, depending upon the child's interpretation of the incident. He may say, " I didn't want the cone, anyway." " Sour grapes " as a behaviour pattern develops in such a fashion (see below, Chapter IX).

Attitudes are thus acquired by each individual towards every part of his universe and himself. A seemingly indifferent aspect of the background of the moment may later determine the total response. The second boy (above) may have been wearing a checked hat. The child who wanted the cone may the next day refuse to wear a checked hat. He says, " I don't like that hat." " Why not ? " asks the mother. " Because I don't." The more the mother insists, the stronger the protest (rejection) and the more he " doesn't like it." The child may have forgotten this particular aspect of the visual environment of the previous day, but it was part of consciousness, and still is, in the background. Such incidents as " taking an instant dislike " to a person or thing, encountered for the first time, are examples of such a development. " Falling in love at first sight " may also be explained in this fashion.

A variation of the innate response pattern of the newborn may be observed. Whenever physical force is used

to direct the activities of a child, there is always an opposing and, if possible, an equal force generated. Resistance to such a situation is innate, since it is present at birth not only in the human, but also in lower animals. This is an exceedingly important phase of the development of attitudes, since our whole concept of freedom and justice is based upon this primitive response pattern. There is no need to describe it further, because such attitudes are a part of every one of us ; we "dislike" being pushed around. On the other hand, where the force is accepted, as in an embrace, we "like" it.

Thus, the attitudes, aside from the relatively simple responses of early infancy (as stated above, individual differences at birth only partly explain later individual differences, thus this factor is relatively insignificant) to a few sensory experiences, are developed throughout later life. Attitudes are mainly *acquired* phenomena. The compliance or non-compliance (negativism) of a child is therefore determined by training. The plan of discipline described above, if followed, will succeed in developing in the child both compliance and non-compliance in accordance with an approved code. If the teacher attempts to *force* the child into compliance, a negative attitude is developed. The child will "dislike" both teacher and "arithmetic," if that happens to be the subject-matter. Such an attitude, of course, impedes learning.

Occasionally one hears of parents who, having observed this negative response pattern of the child, decide to exploit it, in order to command the compliance of the child. They suggest an opposite response, counting on the child to respond negatively. "You can't go to bed now" (when they wish him to go), and the child goes to bed in defiance. But the plan acts as a boomerang when the child discovers the ruse, and then all parental influence is

gone. Politicians, also, frequently use this device for garnering votes, by imputing to the opposite party a coercive philosophy.

Parents often use verbal slogans in order to influence the child's behaviour, e.g. they say, "Eat it ; *it's good for you* " ; " You know I wouldn't ask you to do anything except what is for *your own good* " ; " Do this for the honour of . . ." Sometimes, because of the verbal tag, the child's behaviour is the opposite of what is expected.

The attitude of children towards authority, freedom, co-operation, is determined by the plan of training under which they learn. Hence the importance of the early years.

The attitudes which a child develops towards his own achievements are also important, since they determine whether he will be interested in effort as an enjoyable experience or not. *Æsthetics* is the term applied to approved attitudes towards certain of the objects in the world about us. Children are said " to grow accustomed " to their surroundings. The child, for want of a richer horizon, learns to accept his immediate surroundings. The genesis of his attitudes is readily observed. If the schoolroom is painted a dismal brown, if his clothes are cast-offs, if the streets are drab, he develops an attitude of acceptance towards such conditions ; he must do so. " Children brought up in mean streets of dull house-fronts have but a poor chance of developing that love for the beautiful which, more than any other attribute, distinguishes men from beasts." ¹

In school and home the child is continuously fixing or changing his attitudes wittingly and unwittingly.² The surroundings are potent factors. In schools, at least,

¹ *The Story of Architecture in Oxford Stone*, by E. A. Greening Lamborn (1912, page 89).

² Cf Blatz and Bott, *The Management of Young Children*, for detailed discussion of these terms.

positive attitudes towards brightness, cleanliness, friendliness, décor, balance, composition, etc., should be suggested to children. Usually the only positive attitudes deliberately fostered in a school are towards "antiquity" and "chronological age" and "esprit de corps."

A word must be said about censorship. From the foregoing it may readily be deduced that censorship is a more or less forcible method of creating a negative attitude towards certain objects or ideas. Inevitably the positive attitude is aroused because of the resistance to force. A censored book often owes its financial success to such a contingency. The forbidden fruit becomes the desired goal. Censorship and propaganda are related techniques, and are opposed in method to sound educational practice. The educator (if he is to be called such) presents *both* sides of a problem and permits, even urges, the child to make his own choice. The approved mode of conduct and the accepted solution to a problem are pointed out, but the child is not forced to choose in conformity therewith. If he chooses otherwise, he must, of course, accept the consequences, but, among the consequences, threats of heresy hunting should not be included. The use of propaganda or censorship always implies a lack of faith in the results of the programme of education of the community (see below, under "Security").

The attitudes are classed as "motives" because the behaviour of an individual, in any situation, is determined by the pattern of response which has been acquired. Attitudes may change overnight. A child who eats (accepts) too much gingerbread and is nauseated thereby (rejects) will not relish gingerbread for breakfast the next morning. A kind or flattering remark from a person whom one previously disliked may change one's attitude towards him. "You know, I was wrong about Smith; he really is a decent fellow."

Again, the individual differences must be stressed. Some people invite pain (fakirs), death (martyrs), discomfort (ascetics), grief (masochists), ill health (hypochondriacs), and others eschew such experiences. Pleasure is not the antithesis of pain.

The importance of the early years of a child's life for the development of attitudes cannot be over-emphasised. The prejudices, loyalties, friendships, ethics, and æsthetic appreciation of later adult life are never wholly disentangled from the earliest response patterns.

SECTION 4. THE EMOTIONS

Up to this point we have been discussing muscles, nerves, consciousness, learning, attention, and intelligence; the individual has been portrayed more or less as a mechanism, an automaton. We must now breathe life into this complicated structure, by incorporating the factors that create a zest for life, and try to explain: the mother passionately protecting her young; the ceaseless search of the inventor for a successful gadget; the acquisitive quest of the collector; the rage of the frustrated lover; the petty jealousy of the gossip; the wonder and admiration of the painter for nature's riches; the stubbornness and obstinacy of the disgruntled child; and the loyalties of the king's subjects,—the emotions. Life would be dull indeed if one were bereft of the emotions. Emotional experiences may be devastating, chaotic, thrilling, confusing, fascinating, exhausting, and, above all, infinitely varied, but—what are they? What are they made of? Of what use are they? These are the questions we must answer.

The term "emotion" suggests that it is a disturbing experience, but one must not thereby conclude that a disturbance is always disastrous. Unless one stirs the

sauce on the fire, it may burn ; and so with an individual, the stirring-up often saves him from disaster.

When life flows along smoothly, when, for every situation which arises, the individual immediately has at his disposal a pattern of behaviour with which he can meet the situation to his own satisfaction, then there is no emotion. When, however he is faced with a situation with which he feels that he cannot deal satisfactorily, an emotion arises. An obstacle has been interposed between himself and his goal of the moment, and this obstacle frustrates his desires. An emotion may be said to arise when the individual feels "inadequate" ; the degree of the intensity of his emotion is determined by the degree of his felt inadequacy. Changes take place in the individual which disturb the serenity of his previous condition. First, consciousness is altered in that the "obstacle" occupies the centre of his attention and thrusts out irrelevant (to the individual) conscious material. To use the simile mentioned above, this message is marked "urgent" and other messages are thrust far into the background. Secondly, changes occur in the physiological state of the individual, accurate details of which are, as yet, not known. We know that the heart beats faster or slower, that the muscles increase in tension and that the breathing is deeper or shallower, the blood-vessels contract or dilate, and that glandular secretions are inhibited or stimulated. These changes represent a marshalling of the individual's resources ; the reserves are being called up, and, compared with his previous state, he is a more efficient organism ; he is ready, alert, and poised, mentally and physically. If this is true, why, then, should the emotions be considered by some people as devastating in character ?

At the present time there is some controversy as to whether infants manifest emotions at all. Observation

of a child for the first few weeks of his life will yield no evidence of a *complicated* emotional life. The only statement which may escape challenge is that the newborn infant "emotes."¹ This conclusion is drawn from the frequent "disturbing states" that are observable. Obviously the child hates no one, loves no one, is not ashamed of anything, is neither modest nor immodest, is in awe of nothing, is jealous of no one, and is envious of nothing. He is emotionally *simple* and undifferentiated. The problem presented is how this simple emotional pattern develops into the exceedingly complex adult pattern. In the past psychologists have worked from the complex to the simple. Since the publication of the work of Watson, 1914,² child psychologists have studied the simple behaviour of the child and watched the genesis of later, more complex patterns. In this chapter an attempt is made to describe how the adult, through his early learning experiences, manifests the highly varied and intensely individual emotional life which is apparently so confusing to those who have observed only the adult-end stages of a long learning programme.

The child must respond to any situation positively or negatively (cf. previous Section). When frustrated, the individual may either accept the challenge and attempt to overcome the obstacle, in which case he *attacks*, or he may react negatively to the situation and attempt to withdraw, in which case he *escapes*. *The type of emotional experience is determined by the response of the individual.*

¹ Cf. Mandel Sherman, "The Differentiation of Emotional Responses in Infants, II : The Ability of Observer to judge the Emotional Characteristics of the Crying of Infants, and of the Voice of an Adult" (*The Journal of Comparative Psychology*, VII, 1927, page 335). The sceptical reader is urged to read this highly significant study.

² Cf. Watson, J. B., *Psychology, from the Standpoint of a Behaviourist* (J. B. Lippincott & Co., New York, 1919), Chapter VI, The Emotions, pp. 194-230. This chapter is the starting-point for most modern concepts of the emotions and should be read by all students.

Thus attack and escape are the two basic response patterns which may be employed, and the corresponding emotions engendered are called *anger* and *fear*. From these two basic emotional types all the later enriched emotional life of the adult develops.

Just as in the case of the attitudes, the individual projects upon an object in the environment the "cause" of the emotion. In both anger and fear some object in the environment is selected. Such objects remain more or less fixed for the individual, as an emotional "stimulus." Whenever the individual subsequently perceives this "stimulus," the corresponding emotion may be aroused.

The object so selected does not "cause" the emotions, but its "value" has been determined by an earlier emotional experience. There are no objects which, from birth, cause emotions in children, but "inadequacy" is common to all children. The particular object selected depends upon the immediate environmental milieu. The same objects may initiate the same emotional experiences in many people, but only because of the similarity of the experiences, e.g. many people "fear" snakes, not because snakes are "fear"-inducing objects, *per se*, but because many people have responded to snakes in a similar fashion. The phenomenon of the projection of the emotions has led many psychologists, in the past, to consider that the cause of the emotion is an outside stimulus and hence they sought to identify such stimuli. The quest was unsuccessful because the "cause" of the emotion is "inside" the individual. This will be discussed more fully below.

For a long time past the emotions have been looked upon askance by the moralists and the intellectuals, who have considered them a sign of weakness or decadence, sinfulness, unmannerliness, etc., with the unhappy result that child-training programmes, until recently, have been directed towards the eradication of emotions in human

beings. This tendency is due to the emphasis which has been placed upon the chaotic and confusing *end-stages* of emotional experience. Little emphasis has been placed upon the essential rôle which the emotions play in all learning situations. Without the emotions an individual could never develop ambition, enthusiasm, æsthetics, good judgement, or sympathy. Any plan designed to train a child towards emotional maturity must foster *control* rather than attempt eradication. One must not throw out the baby with the bath-water.

The distinction between "intellectual" and "emotional" behaviour, or "reason" and "emotion," cannot be maintained. As will be shown, behaviour is never purely intellectual or purely emotional. Without emotion there could not be intelligent behaviour. It is the *control* of emotion which determines whether the act is intelligent or not.

Since there are two basic emotions, the method of teaching control in each case is different, so each will be discussed separately.

Anger

Anger is the name applied to the emotion which is aroused when an individual, proceeding towards a goal, is frustrated and accepts the challenge of the obstacle and attempts to overcome it. His initial attempts marshal his invigorated activities and sharpened mental acuity. Apparent success stimulates him as does anticipated failures. If, however, the individual feels that his attempts cannot succeed, and yet still persists in attacking the obstacle, the bodily invigoration may get out of hand and, spreading beyond the immediate circumscribed response area, give rise to total behaviour of a spasmodic, convulsive, and inefficient type. This behaviour is called a "temper tantrum" or "loss of temper," technically

known as rage. Thus, rage has its origin always in anger. *Rage* is anger out of control.

A review of the discussion on Discipline (Chapter V) will recall that a "rage" situation is one in which the consequences are inherent and adequate. Whenever a child is enraged, his chances of achieving his goal are lessened in direct proportion to the intensity of the rage, and hence the proper training procedure is to leave the child entirely alone. In no circumstance should he be allowed to achieve his goal by the mere exhibition of his emotional response.

A study of young children shows that the frequency of temper tantrums increases steadily up to the middle of the third year.¹ This trend is consistent with the fact that a child's wants increase at a greater rate than his ability to gratify them. At about the time when the frequency reaches a peak the child is becoming more skilful, especially if he has an opportunity for learning, and thus, by his own efforts, he may gratify some of his own wants. Furthermore, he learns that there are certain wants which he cannot gratify, and he becomes more reasonable in his attitudes towards them. Whereas at twelve months he cries for the moon, at two years he has given up this want. He learns to project his wants further into the future and can thereby postpone his desire for immediate gratification by saying, "When I am grown up, I can have such and such." He also learns the gratification arising out of day-dreams, which are not altogether harmful (see Chapter IX).

The passive technique for teaching a child to control anger is only *one* aspect of the plan. It can readily be seen that anger is a useful emotion. Enthusiasm, interest, emulation, appreciation of others, these traits of personality which arise out of the responses of anger must

¹ Cf. Blatz, W. E., and Millichamp, D. A., *The Genetic Development of Emotion in the Infant* (University of Toronto Press, 1935).

be fostered. The active aspect of the plan of training lies in developing in the child an approach attitude towards both success and failure. During his attempts to overcome the obstacle the child chooses, from his storehouse of experience, those patterns which he thinks will overcome the obstacle successfully. He may or he may not succeed. He learns that he is not infallible and that the more difficult a task the more likely he is to fail. The fact that he is attacking, that he is putting forth effort, that the goal is desirable—these merge into the emotional state and lend to the experience a thrill which is unique in character. As learning goes on, the child appreciates that the acceptance of the challenge of an obstacle is, in itself, a thrilling experience, and the more difficult the obstacle is to surmount, the more intense the gratification. Thus, failure is one of the most important experiences to a child, providing he learns how to accept rebuffs. The supervisor should never assist a child in a self-imposed task when she sees he is about to fail. If she does so, the child has no opportunity to learn the thrill of challenging frustrating situations successfully.

Furthermore, failure and success should not be exaggerated or minimised by approval or disapproval. Adults often use their social prestige to add an arbitrary enhanced value to success or failure.¹ This technique, quite commonly used by parents and teachers towards children because of the peculiar social relationship which exists in these two situations, seems to lead to immediate results. A parent or teacher can unthinkingly distort the learning programme. First, by identifying the child's achieve-

¹ Success and failure, as learning experiences, have been discussed in detail in Chapter VI, on Persistence, and elsewhere in this book. The repetition is deliberate. The writer is attempting to point out the essential coherence of human behaviour, and further, the necessity for the parent and teacher to understand the "whole" child rather than learn "rule-of-thumb" methods of teaching and caring for him.

ment with the parent's own interests the child's goal may be so altered that the task becomes secondary in importance to gaining the approval of the parent or teacher. Instead of learning arithmetic and enjoying the thrill of number manipulation, the child's goal has become altered to seeking parental or academic approval. Secondly, failures followed by undue parental disapproval, instead of stimulating to further effort, become disappointing and enervating. Instead of accepting failure as an inevitable consequence of new ventures, the child considers them disasters to be avoided. It is evident that the only way in which the child can avoid failures altogether is, (a) never to attempt a difficult task, and (b) mask the failures by deception. One of the most difficult techniques for a teacher or parent to learn is to avoid manifesting ecstasy over a child's skilful performance, and disappointment or chagrin at a child's failures. The adult, of course, cannot be impassive to a child's behaviour, especially if the child is her own or her immediate responsibility, nor is it necessary to be scientifically aloof or coldly objective. The important feature, for parental emphasis in such situations, is to develop in the child an attitude of accepting a challenge, and to encourage *effort* and *discourage* "giving-up." The adult directs the influence of his social prestige towards the doing, not the having-done. Approval and disapproval should be seldom voiced except among equals. Thus, adults, among themselves, may voice approval and disapproval of each other, but, in these circumstances, since they are not attempting to guide or force the other's line of conduct, the expressions of approval or disapproval are taken for what they are worth.

Anger is fundamentally pleasant, since it is initiated by an approach attitude. In addition to the thrill of accomplishment discussed above, the child must learn

to *enjoy* the legitimate exercise of this emotional experience. Games of skill provide such an opportunity. All games possess the fundamental characteristic of frustration ; in chess, tennis, checkers, marbles, fencing, etc., one opponent pits his skill against the other. The fascination of a game lies in overcoming the opponent's efforts to frustrate us. Such a setting provides for emotional experiences of anger under acceptable standards of social usage.

Unfortunately, at present, because of the direction of social approval and disapproval, the emphasis has been placed upon " winning " and " losing. " A child will learn, quite early, that the end-result is more important than the actual playing of the game. If one teaches the child that it is more important to win than to lose, the emotional pattern is distorted so that the child is prevented from developing emotional maturity. The child should be taught to look upon the game as an opportunity for enjoying the fascination of challenging frustration in friendly competition, and that the end-result is unimportant. The more skill he manifests, the greater will be his gratification ; the more skilful the opponent, the more fascinating will the game become. " Winning " or " losing " should merely be signals to limit the duration of a game.

Competition may be defined as a social arrangement for the legitimate exercise of the emotions. " Losing one's temper " in a game is intellectually inexcusable. Such behaviour arises only when one is untrained in emotional control. It is much easier to train a child to control his temper if he is encouraged to enjoy the frustrating efforts of his opponent rather than to seek to " win the game. " The use of competition as an incentive in an educational setting is unsound practice. When a class is learning arithmetic, for example, a teacher has

been known to say, "Let us see who can get the right answer *first*." She is setting each child against his neighbour. The thrill of mastering the problem is supplanted by the thrill of "beating" someone. Obviously there is no inherent opportunity for frustrating another in this setting, except by stealing his pencil or paper or distracting him in some fashion. A child, in such circumstances, learns to achieve "success" only by climbing over his prostrate classmates. Such training prepares the child only for modern business.

It is possible to envisage a generation of children who, trained under a scheme of emotional control, as described above, and growing up into adults, will be neither envious of the achievement of others nor jealous of their own prestige, but, looking upon achieving as the goal of living, will place the ultimate value on the game rather than on the end. The end does not justify the means. The means is all-important.

Fear

Fear is the emotion which is aroused when the individual wishes to withdraw or escape from a situation in which he can see no familiar aspect towards which he may successfully adjust. The situation is novel, new, and suddenly presented, so that it has little meaning, i.e. he cannot "use" it. "Unfamiliarity" is the outstanding characteristic of such experiences. Ignorance may be considered the basis of fear. (The individual may misinterpret the situation and show no fear. To an observer he may give the appearance of lacking fear, when actually he lacks understanding.) Thus, many young children show no fear in situations which are fear-inducing to adults, e.g. bombing raids.

The tendency on the part of the individual in a novel situation is to withdraw or escape. A successful with-

drawal, by the individual, to some situation which is familiar dissipates the fear. If, however, his escape is not successful and is impeded in any way, the fear increases in intensity. His inadequacy becomes more apparent to himself and his efforts are redoubled. If he anticipates failure, his efforts become chaotic and his mental state confused. Thus, as in anger, the response patterns, both physical and mental, disintegrate, and the emotional state merges into terror. Terror is fear out of control. On the other hand, if, during his escape, his efforts are frustrated and he turns "at bay," the escape response changes to an attack and he is no longer afraid, but angry. This behaviour is often called "desperation," e.g. a lioness at bay, defending her cubs.

The child learns to project his fear experience upon some object. It will be readily understood how a familiar object is selected from the situation rather than an unfamiliar; after all, only the familiar aspect of a situation is apprehended.¹ In this fashion, children *learn* to fear familiar objects, the dark, animals, heights, etc., and in this fashion fear-habits, called phobias, develop. Such habits are quite common in most people. Psychiatrists identify some by name: claustrophobia, fear of enclosed spaces; agoraphobia, fear of open spaces, etc.

The emotion of fear, when brought under control, leads to the development of such traits as caution, judgement, courage, research, human sympathy, and charity. The old-fashioned idea that children should be trained to be fearless would, if successfully carried out, eliminate from human beings these qualities which are considered peculiarly human.

A plan of training should envisage the possibility of teaching a child to *control* his fear tendencies. Fear cannot be eradicated, unless, of course, one can eradi-

¹ Cf. Watson, J. B.

cate ignorance. The treatment for the training of children in fear situations is different from that of anger, because they are fundamentally different emotions.

A child is always afraid when he meets with a new situation. Some element to which the child is accustomed, and in which the child has learned to confide, would provide him with a familiar point of reference. The parent, preferably the mother, offers the best device for the assurance of young children. The mere presence of the mother is often sufficient to allay the fear. In the absence of the mother, another human being is the next best substitute. If the child "knows" this person, the familiarity operates as a moderator of the fear. If the child is alone, in an entirely novel situation, the fear may rapidly become terror. But other aspects of the environment also provide a stable, familiar background: his home, the furniture, the dishes, the books, his toys, his bed, etc. It is seldom, in the ordinary home and in "ordinary times," that a child is struck with terror. He is usually too well looked after.

An opportunity for studying children during the blitz, i.e. "unusual times," bears out the suggestions made above. Young children responded less intensely than the adults; they did not understand the full significance of the bombing. While with their parents, they showed remarkable "stoicism," *even though the parents were afraid*. In one shelter, visited during a raid, the younger children were seen to press closely to their mothers; the male adults were in another part of the shelter. Panic-stricken parents, of course, affected the children adversely.

Very few phobias were discovered in children, evacuated over a wide area, who had been blitzed out of their homes. In Garrison Lane Nursery School, where all the children had been through at least one raid, and some of the older ones through many, the practice siren was often

TABLE 4

THE BLITZ EXPERIENCES OF TWENTY-THREE NURSERY SCHOOL CHILDREN¹ IN GARRISON LANE

Age of Child in July, 1942		Number of times blitzed out of Home		Time spent sleeping in	
		Temporarily	Permanently.	Shelter.	Cellar or under Stairs at Home
yrs.	mths.				
2	0		I		I year.
2	3	I		17 weeks.	
2	3		I	I year.	
2	3	I		I year.	
2	6		I	17 weeks	
2	6				
2	6		I	17 weeks	
2	8		I	17 weeks.	
3	2	I		I year.	
3	3		I		I year.
3	3				
3	6				
3	8		I		I year.
3	9	I			
4	I	2		6 months	10 weeks.
4	I				
4	I				
4	2			17 weeks.	
4	3				
4	4		I		17 weeks.
4	4			I year.	
4	4			I year.	
4	6	I			

ignored. During an actual alert the children lined up to the tune of "Polly Perkins" and marched singing to the shelter, far less tense than the adults.

Children separated from their parents and placed in residential Nursery Schools often showed residual fear responses, especially during sleep. But such symptoms were due largely to the loss of parental familiarity and not to the carry-over of the actual bombing experience.

¹ Not one of these children has showed any adverse after-effects of these experiences to date

It is interesting to recall the case of a young lad who was taking home to his mother a pie he had baked at school. On the way home a sneak raider appeared suddenly; the boy flattened himself against the wall, and when it was all over he found his pie also flattened and ruined. Although there was momentary fear, his reaction at this moment was *anger*, and he shook his fist in the direction of the departed raider. I am sure that the residual emotion in English people due to raiding was anger and not fear, which latter condition the Axis would have preferred to instil.

I have not seen an authentic case of a young child (under ten years) who has suffered irreparable mental harm from being bombed-out. Transitory symptoms may appear, enuresis, nausea, nightmares, unstable behaviour, but these are not permanent if the child is placed in an adequately supervised environment. What will be the ultimate effect of such experience on the children of occupied countries, who cannot be given a secure substitute social environment, remains to be seen.

Terror may appear in a child in the guise of a nightmare. Nightmares are quite common in children from two to five years of age. The origin of nightmares lies partly in unresolved daytime fears (see below). If a child should cry out in terror at night, the treatment by the mother is the same as in daytime fears. By her presence and apparent lack of fear she affords a familiar background. The child should be fully awakened, and assured that the mother is actually present. The shriek of terror then turns to a sob of relief, and after giving the child a drink (otherwise he will call for one shortly, after the parent is back in bed), and tucking him in, he should be left. If he shouts again, it is well to call back reassuringly, otherwise this habit on the part of the child may become inconvenient to the household. In the

morning the child is assured that a nightmare is a devastating experience (he may have "forgotten" the whole incident), and that, no doubt in his dream, his inability to escape caused the terror of which he need not be ashamed. Furthermore, he is promised that his mother will always come to him when he is in distress. An analysis of the child's past experience, to reveal the initial cause of the nightmare, is a difficult process and, if such a step is necessary, might well be left for more skilled persons to undertake.

Companionship is the approved treatment for a child who is afraid. Companionship, however, should provide *assurance*, not sympathy. Needless to say, neither ridicule nor censure should be used. No child should be told that he should be fearless, that he need *never* be afraid. The word "coward" should never be used, especially if it implies "a person who is afraid." No human being ever knows enough to be unafraid at all times. Oftentimes a child is told, "Be brave, like your Daddy. *He* is never afraid." This, of course, is rank hypocrisy !

The parent need make no effort to hide her (or his) fear, firstly because it is impossible to deceive a child, and secondly because it implies that fear is disgraceful. The child who knows that the mother, although afraid, still remains a source of refuge, grows to understand the true nature of courage. The essence of courage lies in overcoming the tendency to escape, when for some reason there is a necessity to remain in contact with the "fear-object." The fear remains, hence the greater the fear, the greater is the courage if the individual can control his behaviour.

Provision of a familiar background constitutes the passive aspect of the training programme. An active plan must also be arranged. When a child is afraid, he attempts

to escape (one form of escape-behaviour is to faint, an hysterical outlet, seldom seen in children ; see below) from the situation which is novel, new, and unfamiliar. Referring to the discussion on the appetite of change (cf. Chapter VII, 2), it will be recalled that a new and novel situation satisfies this appetite. So we identify in the fear situation a tendency to escape and a tendency to approach. A conflict arises which may be resolved in one of two ways, escape or remain. The term "curiosity" is applied to this alternating state of mind. Many opportunities are afforded for observing this behaviour in daily life. The following incident illustrates the phenomenon. Travelling in the Subway in New York, I saw opposite me a child of about twelve months, sitting on his mother's lap. Beside them sat a lady, holding an umbrella with a brilliant red plastic handle. In kindly but thoughtless fashion she pushed the head of the umbrella close to the child's face. The child withdrew and clutched his mother and buried his face in her bosom. The lady, momentarily abashed, held the umbrella handle at a "safe" distance. The child turned and, fascinated by the handle, slowly stretched out his hand, and touching it, again suddenly withdrew his hand and looked up at his mother, who smiled reassuringly. He repeated this performance twice, and then grasped the handle and tried to put it in his mouth. The mother intervened and told him to hold it, but not eat it.

This episode illustrates the behaviour of a "curious" child, the beginning of fear, the function of the mother, and the overcoming of the fear by "approaching" the situation. In such circumstances the experience is gratifying and the emotional setting enhances the gratification. Thus the child learns that novelty or "danger" may be thrilling, provided he feels that, at any time, he may successfully "escape" or "withdraw." The point

at which he changes from one attitude to the other is a matter of training. A child thus develops habits of adventure. He must be provided with opportunities for seeking "danger," and "climbing" provides such an opportunity. Since "falling" remains a situation for which the human can never acquire adequate patterns of adjustment (as opposed to the bird), the thrill of placing oneself in danger of falling may be enjoyably experienced by the child. Children do not climb "instinctively"; they learn that climbing is thrilling. The average child will not wittingly climb to a position from which he cannot extricate himself, but he may learn to discount his own skill and to depend upon the adult help. If, for example, the mother comes upon the child on some pinnacle to which he has climbed, and "rescues" him, he must then climb to a higher place in order to experience the same degree of thrill. He learns that if he yells he will be rescued. Even if the rescue is accompanied by a scolding or a slap, the thrill has been worth it. Such a child may develop "fool-hardiness" (see Chapter IX, on Security). The jungle-gym, an apparatus found in every well-equipped Nursery School, is an ideal device for teaching a child the thrill of climbing and also for developing a nicely balanced judgement of his own ability to "take it"—in other words, to teach the child how closely he can approach the point at which his fear turns into terror, and still enjoy the experience. Jumping and swinging are also means of developing the "spirit of adventure." Swimming, mountain climbing, and hunting (rather than shooting) are adult patterns which emerge through this training. War, which is inaccurately classified as an instinct, depends upon this experience for the thrill which often accompanies warlike activities. (Those who initiate war seldom suffer its more unpleasant accompaniments.)

"When terror-struck," the individual is confused and his behaviour chaotic and hence inefficient. In such circumstances, an hysterical response may occur, e.g. loss of consciousness, nausea, paralysis, anæsthesia, etc. In this fashion the individual effectively "escapes." This pattern may become a habit; nausea and bodily discomfort are the preliminary symptoms often present in the individual who is "embarrassed," e.g. the "sunken" feeling. Embarrassment is fear arising in a social situation which the individual feels himself inadequately equipped to deal with.

Children often, if not invariably, develop transient "phobias." They manifest fear in ordinary situations which are usually not "fearful," e.g. fear of the dark. A child is not instinctively afraid of the dark. Through injudicious training such a fear may develop. This projection of fear may be overcome if the mother accompanies the child on a few occasions to demonstrate her appreciation of the situation, and then expects the child to develop "courage."¹ The child should not be forced to enter a dark room or go out into the dark, but where, in the home, darkness is the normal condition, e.g. in a bedroom at night, in a cupboard where his toys may be stored, etc., the child should be expected to meet such situations in a casual way. Assurance is the prime essential for teaching control.

It may be stated briefly that "conditioning" has no place in a plan of training. Fear is dissolved by knowledge. Conditioning occurs at a lower level of neural activity. The conditioned reflex is a physiological phenomenon describing one aspect of neuro-muscular

¹ Cf. Jersild, A. T., and Holmes, F. B.—*Children's Fears*, Part III: *an Experimental Study of the Fears of Young Children* (New York: Teacher's College, Columbia University, 1935)—for an excellent account of the treatment of children's fears in accordance with the suggestions briefly discussed here.

behaviour. The details disclosed in such studies have added little to a better understanding of learning, which is always on the conscious level.

Examples given above have been chosen from "physical" danger situations. It is essential that the training programme should include many opportunities for the child to meet and deal with "ideational" danger. Novel and unfamiliar thoughts may be experienced by the child. It would be surprising if such were not the case. As the child classifies and evaluates his thinking in the light of his contact with the universe (experimental proof), he refines his judgements. He begins to think, as well as to act, logically. Care must be taken to avoid undue censure of his ideas, since courage is required to think differently from the accepted scheme of the community. Generally, the child is warned against unruly thoughts. Such thoughts may be even more terrifying than a physical danger, e.g. the thought that his parents may leave him. With younger children it is sufficient to refrain from ridicule and unwarranted censure. Later, in the educational scheme, more pains should be taken to avoid inhibiting "dangerous" thoughts. Scepticism is the antidote for timid or stereotyped thinking; it is also the training-ground for the development of a "sense of humour."

The habits which are developed in this connection are called "moral" courage or cowardice. As in the case of "physical" fear, the assurance of a trusted adult is necessary, but unfortunately it is often lacking. Death, despair, confusion, futility, may be discussed with an older child as calmly (when he is able to understand such concepts) as falling, burning, lightning, invasion, etc. Knowledge dissipates fear of ideas as well as of things.

The most insidious form of fear is that of being afraid. Such fear can arise only through faulty training,

and so an adult should never ridicule a child for manifesting fear. Many situations are fearful and, unless caution is shown, unpleasant consequences may follow; e.g. swiftly moving traffic, edges of precipices, unstable footing, swiftly running streams, etc., if ignored, may result in bodily harm or discomfort. Caution may be defined as the acceptance of fear as a relevant and intelligent adjustment to a danger situation.

Because fear induces escape or withdrawal, many find it a useful means of influencing the behaviour of others. The priests in ancient Egypt used fear to control the uninitiated for their own advantage. The world is still not free from such conditions. Parents should never use fear as a "handy" method of discipline just because it works, as it assuredly does. There is never any justification for such use of fear. The same warning applies to teachers, headmistresses, statesmen, in fact to all who have to deal with their fellow-men. To instil fear for the purpose of accomplishing an ulterior purpose shows lack of security on the part of the initiator (cf. Chapter IX).

Thus, during the first five years, the child acquires habits of emotional control. The type of emotional behaviour which he manifests at five years of age is the result of his training. He may show courage, enthusiasm, caution, persistence, good judgement (commensurate with his experience), friendly rivalry, or, on the other hand, timidity, foolhardiness, cruelty, and laziness, or any combination of these traits. One may, with patience, unravel some of the complexities of the pattern. The origins of some of the traits may be obscure, but the method of training is unequivocal when once one has decided upon the goal to be attained, viz. control, but not eradication, of emotion.

CHAPTER VIII

SOCIAL DEVELOPMENT

A CHILD, born conscious, begins to catalogue and classify his experiences and evaluate them in terms of his needs and wants. Every moment of his life he is attempting to gratify some particular want or combination of wants derived from his needs.

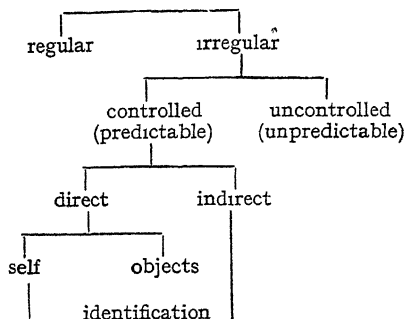
Observation of the newborn child reveals no behaviour that can be interpreted as social, either in terms of needs or wants. A child is born a non-social being.¹ We cannot, of course, penetrate the child's mind nor can we do anything but guess at the conscious development that takes place. Some such organisation as that indicated in the scheme below may exist.

A child's first conscious experience must be one of discrimination. The field of consciousness, from the beginning, is divided into at least two parts, the object of attention and its background. Space and time percepts develop early. Dependent upon the inevitable aspects of the world in which he lives, he distinguishes between events which remain stable and those which change. He classifies events into "stable" and "unstable" experiences. His stable experiences partake of the continuity of his bodily sensations, the visual field—

¹ Cf., Burlingham, Dorothy, and Freud, Anna: *Young Children in Wartime in a Residential Nursery School* (Allen & Unwin, London, 1942), page 56. "Children are born as little savages." This statement is in contradiction to the above. The authors do not mean that children are born as little savages are born, because that is self-evident. They mean, no doubt, that children are born "savage." In my opinion, there is at present no positive evidence at hand to support this thesis. Students should read this book, since it contains first-hand accounts of children who have been blitzed. Although it differs radically from the present writer's in its explanation of the mechanisms of child-development, another point of view is always refreshing.

SUGGESTED SCHEME OF THE CONSCIOUS ORGANISATION OF EXPERIENCE

stable—————unstable



the ceiling of his room, etc. ; the unstable consist of his experience of movement. The unstable may be divided into (a) those experiences which are more or less regular in change, such as the change from day to night, his appetitive cycles ; and (b) those which occur irregularly—thunder and lightning, being picked up, the changing proximity of objects that move about (i.e. persons). The irregular group are then classified into those over which he can exercise some degree of control and which become, in some measure, predictable, and those which are unpredictable and uncontrollable. The experiences in the predictable class are then classified into those over which he seems to have some direct control, e.g. objects. He may throw his rattle from him or reach for it and bring it closer. Experiences over which he has indirect control he will find more difficult to classify. Learning to smile (a muscular movement) brings consequences of a different nature from those of crying. He learns that he can arrange consequences disproportionately to a slight effort of his response. This control is quite different from the direct-action type of grabbing and pushing.

The continuity of his organic experiences and his kinæsthetic sense of muscle action provide a "whole" which is unique. These form the conscious basis of the "self." The next step occurs when he identifies the "self" with the objects over which he has "indirect" control. When he perceives that these objects are "others," or, better, "other selves," he has become a social being. Not until a child identifies himself with the class of "other human beings," which previously were objects not *thus* differentiated in the environment, can he be said to be social.¹ His behaviour prior to this stage of development can be explained wholly in terms of non-social factors. One must not read into the early mother-child or parent-child relation anything in the nature of immediate social significance.

It is easy to understand that a child will develop patterns of behaviour, superficially more or less similar to those of other children, because young children live in an environment which presents many common elements. On the other hand, the superficial "universality" of social behaviour cannot be used to postulate a "social instinct," because there is too much variety in its expression; the differences in social behaviour are more significant than the similarities. The development of social behaviour derives from the satisfaction of a group of needs.

The following group of needs *may* all be satisfied in an asocial environment, but a careful analysis shows that a child will learn that a *social* environment satisfies these needs far more readily: the *attitudes*, for which the human being offers a wide variety of sense stimulation; the *appetite of change*, which demands something new, novel, and unpredictable; the *appetite of sex*, which is

¹ Note, in Table 2, that the child first recognises himself in a mirror at twenty-four months of age.

most adequately fulfilled heterosexually ; the *emotion of anger*, which is most readily satisfied by competitions in sports and games ; and the *emotion of fear*, which is most suitably assuaged by human companionship. A person may be intensely interested in solving a problem in physics, but the study of human beings, which are less predictable than any other object in nature, is potentially more fascinating. To the ordinary person "the study" of human beings constitutes his social experience. After all, one cannot thrill to sitting down to a meal with an "atom," "electron," or "cyclo-tron" as a table companion. One human being is to another the most facile object in the universe ; the most unpredictable ; presents the widest variation in possibilities of change ; affords the most fascinating opportunity for competition ; and, above all, the most satisfying in a fear situation as well as the most gratifying object for sex satisfaction. There is no need to postulate a gregarious-, herd-, or social-instinct of any kind. Such social patterns can much more reasonably be explained on the basis of learned patterns. Furthermore, the above hypothesis describes more adequately the frequent exceptions that one finds to the accepted forms of social behaviour—the hermit, the anchorite, the celibate, the recluse. These "types" are not biologically different ; on the other hand, *they* have found more opportunities for the gratification of *their* wants in "non-social" situations. Also the fact that most human beings seek periods of *privacy* depends directly upon the development of this *want*. Two-year-old children in a Nursery School choose to spend more than half the time working individually. Later, they learn the fascination of social contacts. There are wide individual differences between children because their wants are different. Thus, in a social environment, they take the opportunity afforded for learning the

gratification which is derived from social activities, but also the gratification which is experienced when separated from others for a time, as well as the enjoyment of companionship.

A child begins at birth, if not before, to organise his patterns of behaviour in accordance with his specific needs. He will literally *use* the world as a basis for the satisfaction of his needs and the gratification of his wants. Depending upon the degree of his capacity, he may learn quickly or slowly, but the most significant system of patterns is that which is developed through the use he makes of other human beings. Gradually he will develop a group of skills consisting of the series of patterns which prove most effective in a particular social situation. Thus, while still quite young, he learns when with his mother (at first, of course, he does not recognise her as "mother," nor does he know what "mother" means) that a smile, a cry, a yell, or a whimper is followed by a certain response (consequence) on the part of the "object" near him. These consequences are more or less gratifying. His behaviour patterns will be determined by the particular needs that predominate at the moment. He learns to identify wants, the gratification of which he may look forward to and seek in a social situation. The wants will differ according to the possibilities for satisfaction in the social situation, e.g. with the mother, father, sister, pal, etc. He will want a different type of gratification from the mother than from his companion *after* he learns that these two are different. The more opportunity he has for practice, the more fixed become the patterns. The specific set of behaviour patterns which develop in connection with a particular social situation constitute a "*self*." A child develops a "mother-self," a "father-self," a "brother-self," a "teacher-self," and so on. Each set is fixed in terms of the opportunity afforded for

practice ; some are stable, others evanescent. The child becomes a multiple personality made up of a great many selves, the number depending upon the variety of social situations in which the child has an opportunity for reacting. In each self the behaviour is directed towards the satisfaction of his needs and the gratification of his wants, so that the patterns may differ from self to self. His mother-self differs from his companion-self because the pattern of "crying," which succeeds in controlling the mother's behaviour satisfactorily, does not yield the same success with his companion, so he may be a cry-baby in his mother's company and a tough-guy with the gang.

The mechanism of human social interaction is exceedingly complicated and has no counterpart in physical nature. Chemical formulæ may, in shorthand form, illustrate the effect of one element upon the other. In certain circumstances two elements, hydrogen and oxygen, combine to yield a new substance—water ; in other circumstances the water may be broken up to yield hydrogen and oxygen, which are indistinguishable from the elements which first made up the combination.

1. $H_2 + O \rightleftharpoons H_2O$.
2. $NaCl + H_2O \rightleftharpoons \text{Solution of Salt}$.
3. Child A \rightleftharpoons Child B.

Here are three formulæ. The hydrogen and oxygen are the same before as after they combine and are recovered. The salt, after evaporation, is the same as before it entered solution. The reaction between the compound and the elements may be called reversible. The change from a solution to a separation of the solute from the solvent is reversible. When two human beings react upon each other, however, the reaction is always in two directions and at the *same* time, but never reversible. Child A and

child B meet, each responds to the other in terms of his interpretation of the other's behaviour. Every moment is an experience for both and their experiences are indelibly etched. These children are, literally, never the same again. If child A smiles and child B pokes him in the eye, then this experience becomes part of the past of both, but it is different for each one: one has smiled and been hit, the other has seen the smile and hit. Both come away from the experience changed in a different way.

One may readily misinterpret the influence of environment upon social behaviour, e.g. one hears the statement, "The children in a family live in the same environment," but actually no two people can ever be in the same social environment. Child A's environment includes B, but for child B the environment includes A. This circumstance explains how the individuality of each person develops, how no *two* persons are ever identical, biologically or socially. It also explains how, in the same family, the children, brothers and sisters, show marked differences in their social behaviour. No two children, even twins, are treated "exactly alike" by parents, relatives, or friends.

The evidence for this interpretation of social development was gathered during our study of the Dionne quintuplets.¹ These five children, being "identical" biologically, very quickly developed individual "selves." Their social behaviour patterns began to diverge very quickly after their second birthday. The physical environment was "constant," but the important social environment was different for each one, e.g. Annette had as *her* social environment Yvonne, Marie, Cecile, and Emile.

¹ Cf. Blatz, W. E., *The Five Sisters* (Morrow & Co., New York, 1938). Also, for a more detailed description, see Blatz, W. E., *et al.*, *Collected Papers on the Dionne Quintuplets* (University of Toronto Press, 1938).

Emile, and all the others, had Annette for an environmental object.

Dominance and Submission

Two individuals are said to behave "socially" when each is aware of the other and is using the other to gratify his wants. As long as each is content to continue this relationship, it will continue as a social group. But if one tries to influence the other to gratify a specific want, and the other wants the same thing, there will be an impasse; when two children are playing and each wants to use the same toy, e.g. A wants B to get into the waggon so that A can pull him about and B wants A to get into the waggon so that B may do the pulling, the social situation becomes critical and either (a) one must accede to the wishes of the other, or (b) dissolve the social interaction. A, the owner of the waggon, may say, "All right! If you don't get in and let me pull you about, I'll take the waggon and go home." B must choose on the basis of his immediate wants, and asks himself, "Is it more desirable to sit in the waggon or to be deprived of both waggon and A?" or "If I hold out longer than A, will A 'give in'?" A, also, must choose between possession of the waggon and the companionship of B. The consequences of the choice of behaviour will determine which pattern will survive. If both discover that the dissolution of the companionship is undesirable, they may come together again and attempt to work out a solution. The only solution for attaining companionship is for one to "give in." At any moment one of a pair is successful in influencing the other to act in a manner suited to his wants, and the other, if the social situation is to continue, must conform to the pattern dictated by the first. It must be understood, however, that in these circumstances each one is behaving as he *wants* to. If A wishes to pull B seated in the waggon and

A has persuaded B to conform to this pattern, A *wants* B to sit in the waggon and to be pulled about, but B, at that moment, *wants* to sit in the waggon and permit A to pull him—both are gratified. At this particular moment this social situation may be defined as *dominance* by A and *submission* by B.

Submission and dominance are terms which are used to *describe* a social situation. The needs of each one of the pair are satisfied, whether submitting or dominating, but the rôles of each child may alternate from time to time.

Whereas in the beginning the form of social behaviour may be either "dominance" or "submission," depending upon which leads to the satisfaction of the individual's needs, later on, in communities where dominance is held up as a more desirable pattern, the child may develop a *want* for dominance and a *distaste* for submission. The social pattern of our civilisation is definitely one in which dominance is advertised as the more acceptable pattern. "Get ahead," "Be first in the class," "Don't let him beat you," "There is always room at the top," "Don't take his dust," "Britons never shall be slaves," these are the slogans that indicate the social pattern into which our children are born and after which they pattern their behaviour.

Thus the child grows up to *want* to dominate, and dominance may become an overpowering want. The desire for "power" for power's sake is the result of learning; it cannot be an innate need. Whenever the social group consists of more than two persons, such as a class, family, congregation, or an audience, there is always *one* member who is dominant and all the others submit. This condition must hold, otherwise the group would split up into as many units as there were dominating persons of the moment. Persons gather together in groups for a specific purpose, a common interest, whether it be swimming,

debating, electing, learning, profit; clubs, families, factories, congregations, and so on. The dominant person in a group is the one who, for the moment, or for a longer period, is *accepted* as a "leader." A leader is not born, he is made. The leader has a status in the community, and is said to have prestige, but each member, as well as the leader of the group, has a status which is a measure of the prestige which he possesses. Prestige is the degree of influence which one person exercises over others. The status is the position of the individual in the group with reference to his prestige. One's status is determined by one's prestige.

Let us examine how one obtains prestige, and how one's status is determined in a group. There are two methods, the direct and the indirect. The direct method of developing prestige is by learning a skill in the specific activity in which the group is interested, and on account of which they gather together, e.g. a swimming club. Individual members who, through their own efforts, have attained a certain degree of skill are interested in their own achievement, but acclaim that individual whose achievement exceeds their own. (See Chapter VII, 4.) Interested in the specific skill, an individual is willing to give prestige to that person who, also interested, has attained a higher degree of skill than himself, and is the leader. The status of each one in the community is determined by the degree of skill which he has acquired. The dominance of the most skilled is gratifying only if others less skilled are stimulated to put forth greater effort so that their skills may increase in performance and more closely approximate the achievement of the leader and, indeed, excel. Such a leader is interested not in dominating, but in inspiring, and his followers are not filled with envy, but with emulation. The leader gets no thrill in dominating, as such, nor do the followers feel humiliated because of

their submission. Such a social gathering is relatively rare, but not non-existent. It may be found in the academic field and has not been entirely absent in the arts, but is seldom, if ever, found in business or international relations.

If the method described above were the only way in which one could obtain prestige, social life would be pleasant indeed, but we will now consider the indirect method. Let us suppose Jimmie Smith a member of the "Alpine Swimming Club," organised casually by a group of his nine- to ten-year-old companions. He swims fairly well and is sufficiently gratified by the companionship and his enjoyment of his skill to accord the leadership to others. He discusses the activities of the club with his father, casually, at the dinner table. "Are you the best swimmer?" asks the father.

"Oh, no! Billie Jones is by far the best," replies Jimmie.

"Why aren't you the champion swimmer?"

Jimmie, shrugging his shoulders, finds it difficult to explain that he is having fun and is really not interested in beating anybody, and he has other activities which take up his time in a more interesting manner than practising swimming.

The father misinterprets the shrug as indifference, and says, "My boy, the Smiths have never taken second place to the Joneses and I don't intend to see this generation doing so. You start in and work. I'll get Brown, our professional at the Royal Aquatic Club, to give you lessons."

Jimmie then starts a series of "lessons," but after some months is still not the "champion." The father then decides that if his son cannot lead in one way, he may in another, and so he says, "Jimmie, why don't you organise your club?"

In some bewilderment Jimmie asks, "What do you mean—organise? We don't need any other organisation than we have. We meet every week and have fun."

"Ah, yes, but you should have an executive, a president and a secretary and minutes and contests."

In the end he persuades Jimmie to start the organisation and coaches him in lobbying, elections, rules, etc., and finally is pleased when Jimmie is elected first President of the Club. By this time Jimmie has become interested in this routine. He thrills to his position. If he cannot win the cup (which his father has presented as a trophy), he at least hands it to the winner!

Jimmie has arranged for his prestige by an indirect method (or at least his father has done so).

Thus, because of the emotional immaturity of most human beings, every society, from primitive man, to date, has arranged certain artificial and arbitrary methods of obtaining prestige. Because of emotions perverted by competition, dominance has come to have a high positive incentive value and submission an equally high negative incentive value. Following upon this tradition, individuals, in order to obtain prestige without effort, foster certain customs and traditions. Some of the "symbols" of prestige, fostered by social approval and hallowed by custom, are, age, beauty, money, class, colour, race, religion, birth, titles, honours. None of these necessarily depends upon individual effort, and social approval alone determines their effectiveness. A revolution in society may alter the value of each device, and so an individual whose prestige depends on these artificial factors must reject any social change lest his prestige should suffer. Arrogance, snobbishness, exclusiveness, intolerance, these are the essential defence mechanisms which such persons must employ in order to maintain their prestige. Resentment, insolence, detraction, belittlement, are the be-

haviour patterns manifested by those who lack these qualifications and who have not, through their own efforts, developed direct prestige of their own. An individual whose prestige is obtained by the direct method, namely, personal skill, need never be apprehensive of his status, because skill, as long as the individual is interested, cannot be taken away by revolution, economic catastrophe, or arbitrary devaluation. (See the next Chapter, on Security.)

Those whose social life is determined by the quest for dominance are said to be intoxicated with the desire for power. If there is such a thing as an inferiority complex, it may be recognised in an individual who feels that he should have prestige but is unwilling to put forth the effort to obtain it.

One technique, namely, the use of force in social situations, must be discussed. It was pointed out above (Chapter VII, 3) that force exerted upon another person stimulates in him an opposing force. Force is obviously a direct method for influencing the behaviour of another person. The method is successful if the force applied overcomes the resistance of the other. The person possessing superior force considers that its use is the easiest and most expedient method of satisfying a want. All children use this method at first. If, later, the *want* for power or possessions is acquired, then it is obvious that force is the most successful technique for gratifying this *want*. If the individual is willing to ignore the weaker opposing force, he may even justify his behaviour by saying he has the "right" to do so. The person who is overcome remains continuously resentful, however obedient he overtly appears. Force, as an influence on human behaviour, seldom succeeds in building a permanent relationship. A want gratified by force and maintained by force is an instance of unstable social equilibrium.

Prestige based upon obedience, exacted by force, can never survive the loss of the ability to exert superior force ; rebellion is then inevitable. In the history of the human race, force used to enhance prestige has never solved a social problem.

On the other hand, force may be used in some social situations and is often necessary to solve immediate problems. A parent in teaching a child regular routine habits often uses force. For example, a child who refuses to go to bed is taken there by force, a child who insists on running out into the street where there is danger of his being injured is restrained by force, and so on. But in these cases force is not used as a device to enhance the prestige of the user, but is used in an educative process, in the same way as nature exerts force on those who have not learned to adjust. The individual uses force in this manner to administer a responsibility and not to exercise "power."

It is this bivalent use of force, in one instance to gain prestige, in the other to accept responsibility, that has caused so much confusion in social thinking. In Germany today, force is being used for its prestige value. We hope that the Allied cause is using force in the direction of accepting responsibility. War, which is the ultimate expression of force directed against other human beings, could not occur if human society were organised in such a fashion that social prestige depended upon the direct method of the acquisition of skills and not predominantly upon the indirect techniques mentioned above.

CHAPTER IX

SECURITY

UP to this point we have been psychologically dissecting a human being and discussing him by compartments. It will be necessary now to reassemble the parts and consider the individual as a whole. Any system for explaining, or rather describing, a human being living in his environment must look for some guiding or co-ordinating principle, a fundamental goal, which is always operative and is paramount to the various subsidiary aims which have already been described. Some unifying principle must be postulated which can be identified in every situation. To be sure, we must understand that the attitudes, the appetites, and the emotions are factors which determine the immediate choice of behaviour. But these alone do not explain such modes of human behaviour as marriage, war, mobs, religion, loyalties, and so forth. In such situations the needs and wants discussed above are undoubtedly operative, but the whole is greater than the sum of its parts.

Many such "fundamental" principles have been suggested throughout the history of human thought: the pursuit of pleasure; the hope of salvation; the satisfaction of libido; the search for the good or the absolute, and many others. In every one of these systems the goal has been defined as an *end*, and the individual is thought of as striving towards this, which, having been reached, is the be-all and end-all of existence. The concept is one of fulfilment or completeness.

Throughout this book the dynamic nature of human life has been stressed. It is obvious that a *dynamic* goal describes the strivings of human beings more accurately than a static one. A dynamic goal is not a new idea.

"Whosoever shall seek to save his life shall lose it; and whosoever shall lose his life shall preserve it" (Luke xvii, 33). This quotation has usually been interpreted to mean that an individual can reach fulfilment only in immortality. It is considered here that this statement refers not only to life after death, but to life in living. Life is not fulfilment, but fulfilling.

What is it that directs man in his striving? Man seeks *security*. Security may be defined as the state of consciousness which accompanies a willingness to accept the consequences of one's own decisions and actions. Only thus can an individual feel comfortably adjusted to his environment. This concept of security is dynamic, for his adjustment can never become static. Any attempt on the part of the individual to maintain the *status quo* is ineffective, because life is a continuous process and his security is based on the future, not the present or the past. It is unfortunate that, in our language, there is no term to distinguish security as here described from the common meaning of security which implies safety. Safety is the antithesis of this type of *security*. An individual seeks to be secure and must continue his search, for as soon as he stops he becomes insecure.

Diagram 1 will help to clarify the description. From this diagram it can be seen that the individual may feel secure in two ways, through dependence or independence.

Dependent security is that state where an agent accepts responsibility for the consequences of an individual's actions. The individual then feels free to act in accordance with his own desires and wishes, because he does not have to accept the consequences of his behaviour. A state of dependent security is manifested by a human infant, for whom the parent acts as agent. The child is unaware of this agent at first and does not appreciate that he is *not* accepting the consequences. But through-

DEVELOPMENT OF SECURITY

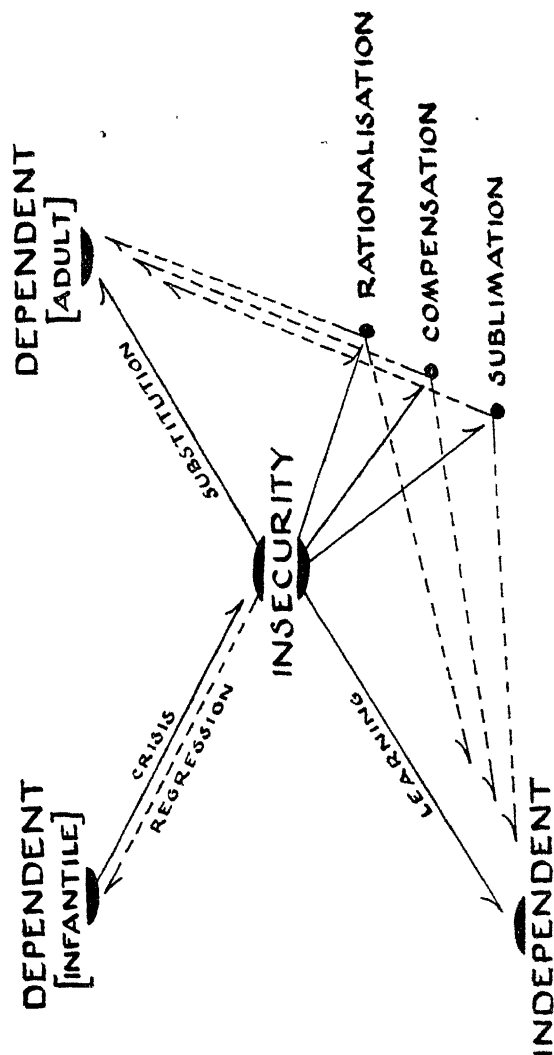


DIAGRAM I

out life there are other agents besides parents which yield dependent security. As long as the individual does not recognise that the agent is operating, the dependent security, to all intents and purposes, is psychologically similar to the independent. Examples of such agents are inherited or invested wealth, social position, immunisation, the Maginot Line. It is obvious that the agent is subject to crises which may remove it, as agent; the parent dies, the company fails, the immunising technique is inadequate, the Maginot Line is turned on its flank. When the individual ignores the possibility of a crisis, his state of mind may be described by the saying, "Where ignorance is bliss, 'tis folly to be wise"; but wisdom cannot be acquired overnight and the bliss may be short-lived. As soon as the individual loses the agent, or loses faith in the agent, he is no longer secure, but *insecure*.

Independent security can be attained only in one way, by the acquisition of a skill through learning. Whenever an individual is presented with a situation for which he is inadequately prepared, or whenever he is striving for something and finds that his preparation is inadequate, he must make one of two choices, either to retreat or to attack. This situation is emotionally charged, but there is more than the emotional content in such situations. The individual must, if he is to attack, emerge from the security of a dependent sort and accept the state of insecurity. His attack, of course, will result in learning; the degree of skill which he acquires will depend upon his persistence; but once having learned, he will meet this situation in the future with assurance, because now he possesses a behaviour pattern which makes it possible for him to adapt himself satisfactorily. Furthermore, he has become familiar with the consequences of his attack and is willing to face them. Such a skill, having been

acquired through his own effort, cannot be subject to the same kind of crisis as the other agents which have been described. (It is, however, subject to the crisis of accident and disease, but not death.) The individual, through his efforts, learns that satisfaction results from overcoming the apprehension and anxiety experienced when insecure, and that he may thus reach a state of independent security through learning. He develops a habit of accepting insecurity as the only way towards independent security. Having once experienced independent security, he learns that he may continue in this state only if he continues to learn more and more, because learning itself exposes the need for further learning (research is aptly named, because every problem which is solved exposes many others awaiting solution). Independent security thus provides an ever-receding goal. Hope does not consist in reaching a specific goal, but rather the solution of each immediate problem beckons towards a future of further effort. Absolute independent security can be attained only by an individual who knows everything and can do everything ; one who is omnipotent and omniscient. It is not by chance that these two characteristics have been, throughout the ages, ascribed to the Deity in which one believes. Thus, independent security can never be attained by man in any lifetime. The longer he lives, the more he realises how little he knows and how much there is still to learn.

One may well ask, then, why, if a child at birth is dependently secure under a parental agent, should he try to become independently secure if such an attempt inevitably postulates a period of distress and apprehension, i.e. insecurity ? This question is answered by the fundamental capacity of all human beings to learn. The individual may choose *what* to learn, but he can never prevent learning from taking place, because each moment

of experience is a *new* experience which inevitably changes him, whether he wishes to change or not.

The child rests secure in his mother's arms as he is carried about. The appetite of change demands that he try self-locomotion. He rolls, crawls, then walks. At each stage there is a momentary insecurity which he overcomes by becoming more skilful. The consequences of his walking activities will determine whether he will overcome the inclination to withdraw from the insecurity which he immediately feels or to "take it in his stride." His decision in the matter will be determined by many factors, among which parental attitudes will be largely dominant. How quickly he learns to walk is not solely a matter of muscle co-ordination, but more significant are the habits he is building with reference to the striving for independent security. The correlation between the age of walking and the I.Q. is relatively low. A child, because of some form of rebuff, e.g. falling and hitting his head when taking his first step, attempts to retain his dependent security, with the parent as agent, much longer than others. This continued dependence may impede his later development towards maturity. The sudden removal of a parent may leave a child feeling insecure and without a pre-learned pattern to relieve his insecurity. He immediately seeks a substitute agent. According to the Freudian philosophy, this phenomenon is identified as an Œdipus complex, but according to our description the heterosexual component is only one of the many factors involved and, in early life, is relatively insignificant.

An insecure individual may choose one of three plans of procedure: (1) he may make an effort towards independent security through learning; (2) he may withdraw from the tendency to attack and return to a previously satisfactory agent; or (3) he may adopt a deputy agent.

From the point of view of mental health, the first choice is the type of activity which we attempt to instil in children. Number (2) may be unhealthy, even though the agent may remain operative throughout the lifetime of the individual, since in *most* cases the agent may be removed by some catastrophe when the dependent individual has had no opportunity to learn to accept the challenge of insecurity and must then hastily find some substitute agent. The security which he thus achieves is seldom as satisfying as under the first agent, because the catastrophe itself has shown him that such agents may not be wholly trustworthy. Some measure of insecurity prevails, and the individual must then have recourse to some form of plan number (3).

Plan number (3) is the commonest technique used by an individual for avoiding the immediate effort necessary to achieve independent security. If he uses a deputy agent only as a temporary expedient which he recognises as such, no harm arises ; but if he persists in using it to solve the same problem again and again, then it becomes a permanent agent, open to subsequent crises, and becomes an unhealthy device.

Examples of the manner in which these devices function are as follows. (See Table 5.)

1. *Substitution*.—The child finds that persons other than the mother may be depended upon. The spread of dependence to other adults is a necessary step in emancipation. Delay in such a spread is represented by such behaviour as inordinate crying when the parent leaves the room or the house. An unhealthy substitution is that of the child who will not go to bed unless he has a particular toy, will not eat unless the food is put on a particular plate, etc. A child was brought to the Nursery School holding a blanket in his left hand ; he would not let it out of his reach. The mother washed it

TABLE 5.
DESCRIPTION OF TYPES OF BEHAVIOUR EMPLOYED TO AVOID
INSECURITY

<i>Device for using Deputy Agent</i>	<i>Child</i>		<i>Adult</i>	
	<i>Healthy.</i>	<i>Unhealthy.</i>	<i>Healthy.</i>	<i>Unhealthy.</i>
SUBSTITUTION	—Attach- ment to nurse, grand- mother, etc, sib- lings.	—"Playing- off" one parent against the other —Using a toy as constant companion	—C o m - panionship —Religion	—H o m o - sexuality —Bigotry
RATIONALISA- TION	—"When I grow up I will do thus and so."	—"S o u r grapes"	—Logic is the safest form of rational- isation.	—Excuses— "I have no time" "It isn't done."
COMPENSA- TION	—Accepts submis- sive rôle.	—Spanks her dolls in play —Bullying	—"Hobbies"	—Arrogance —S n o b- bishness —Cruelty
SUBLIMATION	—Obeys rules in order to belong to group	—Sulking	—Sports	—Hysteria —Masochism

every night while he was asleep. One night, during a high wind, it blew away off the clothes-line, and there was a terrible to-do. A child at Garrison Lane, on the first day, refused to permit us to take off her bonnet or overcoat and kept a tight hold of a small bouquet of flowers given to her by her mother. She ate with one hand, washed one hand at a time, and slept with the bouquet tightly clasped in her hand. She was an only child; her father had been in the Forces since before her birth. On the second day she accepted Miss H. as a substitute.

In later life a substitute must be accepted on account of the individual's lack of knowledge and incapacities (see below) ; the healthy form of such substitute is companionship of contemporaries and spiritual faith.

2. *Rationalisation*.—This is the most common form of deputy agent. By accepting some other agency as the "cause" of the consequences there is no need to accept them. "I am too little, but when I grow up I shall cut down that tree." An unhealthy sign is when the child belittles an unattained goal. "I didn't want him to play with me, anyway" may cover his disappointment at a companion's departure because of his own ill-temper. It would require several volumes to enumerate the infinite variety of excuses given in adult life for one's own carelessness, indifference, clumsiness, etc. Concocting alibis is the favourite indoor sport! A healthy form of rationalisation is to reason and thereby attempt to analyse a situation. The schematic method of reasoning is logic, which may be defined as the scientist's form of rationalisation.

3. *Compensation*.—When a child gives up one want in order to gratify another, he is compensating. The child, described above, who is willing to give up the use of his waggon to his pal so that he may enjoy his companionship is using this device. If, however, he bullies a smaller child because he has been unable to persuade his mother to give him a biscuit, he is employing an unhealthy method. In adult life, "hobbies," in which the individual may display any form of free enterprise, compensate for the necessity to perform tasks of drudgery to earn his living. Unhealthy methods are represented by arrogance, intolerance, and cruelty.

4. *Sublimation*.—When a child suppresses the want acquired for satisfaction of one need and accepts a want referring to another need, he is sublimating. Thus,

if the child is willing to interrupt his play in order to wash his hands so that he may eat, he is sublimating. If, on the other hand, he uses an emotional display in order to get something to eat, he is also sublimating, but in an unhealthy fashion. This form of behaviour degenerates into sulking, which is often seen in adults. In adult life the enjoyment of sports and dancing may sublimate the desire for sex satisfaction. An unhealthy method is to use a device to gratify both needs at once, e.g. masochism. Hysteria is a common form of unhealthy adult sublimation.

Thus the use of these four techniques is not necessarily reprehensible. Every person compensates, rationalises, sublimates, and substitutes. Unless he is to incur serious consequences, the individual must recognise that he is using them deliberately. He is then said to have *insight*, which implies that he "knows what he is doing." Oftentimes it is difficult to recognise that the device is covering up the reluctance to expend effort, and in this fashion the deputy becomes incorporated into a "neurotic" system in which insight becomes impossible, except with the help of a skilled adviser. These four techniques actually supply agents for dependent security. As long as they are effective the individual is apparently content, but, like all forms of bribery, they must increase in intensity as time goes on, because the individual is always somewhat apprehensive lest the catastrophe which removed the previous agent should be repeated. The prognosis of the mental health of an individual may be gauged in terms of the type of device he uses to attain security. The dependence-independence ratio changes as he grows older. A ratio which is healthy at two would be significantly unhealthy at twenty-two years of age.

Diagram 2 illustrates the growth of independence of the normally mentally healthy child. The slope of the

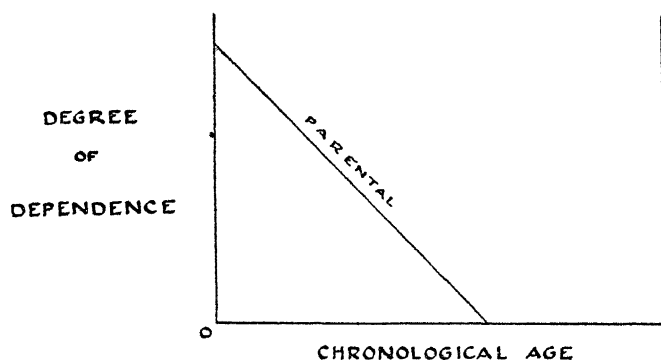


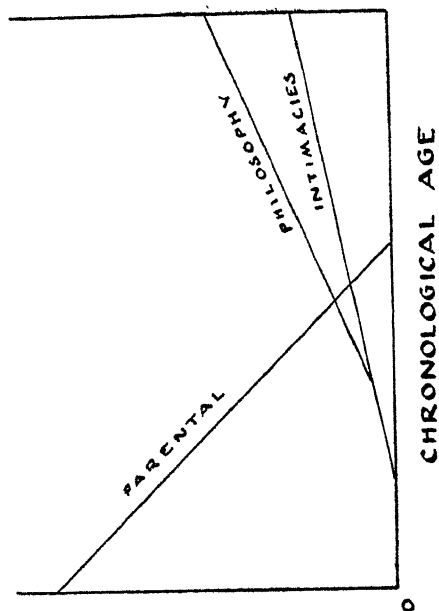
DIAGRAM 2

line represents progressive emancipation from parental dependence. The point where this line crosses the base line indicates the age at which the child is independent of his parents. He cannot, however, be independently secure, because he has learned so little, at this age. If he is not to be continuously insecure he *must* have accepted a deputy agent before this point as a substitute for loss of parental dependence.

There are two mature and healthy substitutes which human beings have employed throughout history that have functioned fairly well, *philosophy (religion)* and *intimacies*. Diagram 3 illustrates a normal healthy development. The child begins to learn to be independent from birth, if properly trained, that is, left alone for periods during the day, even if he cries. At two years of age he should have an opportunity to associate with his contemporaries, in order that he may substitute intimacies with them for parental dependence. The progress is slow at first, but gathers momentum as he grows older, and if his social life is unhampered by artificial barriers (e.g. being sent to a non-coeducational

INDEPENDENCE

DEPENDENCE



CHRONOLOGICAL AGE

DIAGRAM 3

DEGREE
OF
DEPENDENCE

school). Between the ages of twelve and sixteen years he begins to feel the necessity of "explaining life," and his spiritual experiences may begin. He substitutes a philosophical concept (faith) for parental dependence.

If the individual chooses a mother-substitute or a father-substitute, then the course of his development is represented as in Diagram 4. In such a case the indi-

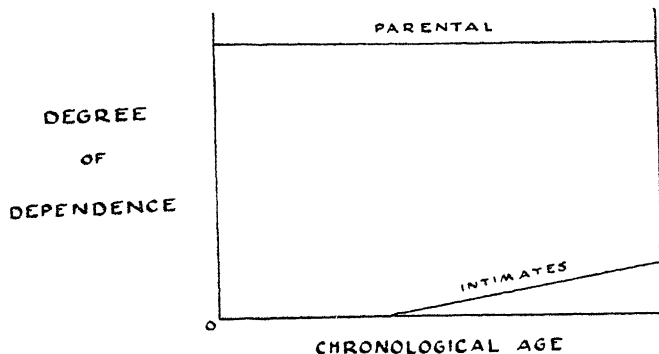


DIAGRAM 4

vidual remains infantile throughout life. His subsequent adult behaviour, although superficially mature, being a reflection of his chronological age, is nevertheless a reduplication of his infantile security patterns.

Substitutes for parental dependence in infancy may be adequate for that chronological level of development (e.g. accepting a foster-mother upon the death of a mother), but a persistence of infantile substitutes at a later age would indicate that the individual is not developing an independent form of security. The *form* of the behaviour is not necessarily indicative of the process which is going on. For example, "shy" behaviour may represent a withdrawal by the individual from the possibility of feeling insecure in a social situation

for which he feels unprepared, or it may be that the individual is quite satisfied to remain aloof, does not wish to participate in the social situation in which he finds himself, and feels no inadequacy whatsoever. Thus a scheme of training should not force individuals into a common mould with a standard form of behaviour as the desired goal, but rather it should fit the individual to make up his own mind *and* accept the consequences of his resultant acts.

A brief summary will be given to indicate later adult development.¹ Although this book is concerned mainly with young children, the adult goal should always be kept in mind. For purposes of analysis the adult is divided into four compartments—his philosophy, avocation, vocation, and intimacies. These compartments overlap, but the classification has been found useful, not only for diagnosis but also for therapeutic suggestions.

Each of the four divisions of an individual's life may be secure dependently or independently, or may be insecure. If insecure, the individual reverts to the old agent, accepts a new agent, acquires a deputy agent in the form of some compensatory or other mechanism, or puts forth effort to attain independent security. The behaviour which he manifests must be judged in the light of these possibilities.

In early life the necessity for a philosophy does not exist. The human infant is not interested in the ultimate, nor does he find any necessity for a dependent agent beyond his parent. As he grows up, however, he learns that knowledge and skill are unending and that he can never become wholly independent. The failures he encounters contribute to this experience. He begins to enquire into the significance of events beyond his compre-

¹ This is condensed from a book, on the subject of "security," in preparation for publication.

hension, and finds refuge in some faith and belief beyond the realm of "reality."

It is the common practice to prepare a young child, in advance of this stage of development, by teaching him the dogma of a particular orthodoxy, so that, when the need is felt, an agent is at hand. An adolescent, after training in the catechism or the scriptures, may accept or reject the "form" of agent which they represent. One wonders whether the teaching of concepts, meaningless during the early years, is intended to satisfy the young adult or to determine which agent he shall ultimately choose. It is obvious that a mature individual cannot carry on without some philosophy of life. The traditional orthodoxies are satisfactory agents, providing that the individual *believes*. Faith is essential. But such agents are subject to the crisis of doubt and subsequent loss of faith if the doubt (insecurity) is not resolved. An individual is insecure when doubting. The easiest and quickest method to recover security is to accept a substitute, similar to the former agent, which explains the many conversions during early adult life and also late adult life. Religion should not be an emotional experience, but a satisfying one. Serenity, not exaltation, is the characteristic of a satisfying faith.

It is doubtful whether any *human* being can enjoy a state of mental health without some opinion or faith about the purpose of living. The test of faith in an orthodoxy is the serenity experienced by the faithful. Emotionalism is a sign of insecurity. The emotion arises when some experience in ordinary life conflicts with one's faith, when the individual is presented with the paradox of a thing being what it is not, e.g. if he finds that the concept "miracle" is untenable in the face of certain scientific demonstrations. The conflict arouses emotion and the individual must seek a solution, not only of the

paradox, but of the whole problem of "being." Since the individual is incapable of "solving" the riddle of the universe, he must either, as mentioned above, revive his original faith, or adopt a new orthodoxy (conversion), or seek from experience to formulate his *own* orthodoxy or plan of life. To accomplish this requires a degree of mental balance, self-confidence, and intellectual honesty such as few persons possess. The other, most common alternative is to seek refuge in some form of rationalisation such as agnosticism, compensations such as bigotry and fanaticism, or sublimation by ridiculing the faith of others.

In one's *vocational* life one is independently secure when one accepts the responsibility for contributing to one's own survival and co-operating within the social community. In a capitalistic system an individual is dependently secure when he has a position or a job which pays him a salary upon which he may live, or when he has invested funds which produce an income sufficient for his wants. In a settled period of rational economy this security may be satisfying. During the past thirty years, however, there have been so many financial and economic crises that such a person can no longer feel dependently secure.

An individual is economically independently secure when he has developed sufficient skills of a kind necessary for the preservation of society. The physician, the teacher, the farmer, or the artisan may be independently secure. The broker, the lawyer, or the banker can never feel independently secure in his vocation. The physician *can* be secure if he remains a physician; but if he becomes more interested in building up a large estate or a social position for his wife, he ceases to be a physician and becomes a financier or a socialite. The farmer can be independently secure if he is satisfied with living on the land and contributing a portion of his produce to others in

return for services rendered ; but if he becomes interested in the acquisition of more land than he can till, he ceases to be a farmer and becomes an investor. An individual who is independently secure is never apprehensive about any change in the social structure. If the change is made, he adjusts himself to it, carrying on his trade or profession as before. Those who are dependently secure resent any change which may be suggested. In an economic, industrial, or political crisis the dependently secure people anticipate insecurity and they must either resist change or arrange a substitute. Oftentimes the old order is dressed up to look like new, at other times the old order is retained at all costs, even with violence. A reactionary is an individual who refuses to accept even temporary insecurity—he must maintain the *status quo* ; the radical is one who wants any change at all ; the former usually has everything to lose, the latter everything to gain. Today it is common for the insecure person to substitute one political party for the other, hoping, without effort on his part, to reach an economic refuge, a safety zone, a dependence. If he finds this impossible, he rationalises by producing a panacea of some sort (social credit), compensates by some form of violence (revolution, strikes, oppression), or sublimates by saying that the whole thing is “ none of his business,” “ let the politicians run it.”

Plans for vocational training of youth as yet emphasise a narrow goal. The child is encouraged, as he grows up, to select some *one* aspect of the economic structure which he would like to support, i.e. prepare for and look for *a* job. This plan has had tragic results. Periods of unemployment are indicative of an economic structure built up on dependent security of both employer and employee. An educational philosophy should be independent of industrial expediency. The child should

be trained in *skills*, not in *a* skill, so that, when he reaches maturity and wishes to contribute to the social well-being, his contribution is made where necessary and so, having more than one skill, he can contribute in more than one way. Education should train the graduate to seek to contribute to the community a part of his effort, asking "What am I to do to help?" rather than a way to expropriate his wants, asking "The world owes me a living. Where is it?"

The *avocational* aspect of modern life has been sadly neglected. An individual is dependently secure if he can afford to pay for his entertainment during his leisure time. The cinema habitué and the betting-addict are examples of this type of person. An individual is independently secure if he has acquired a sufficient number of skills to keep his leisure time fully occupied. It is significant that these activities are called "hobbies," as if they were the trivial pastimes of eccentrics.

The development of leisure-time interests should be the most important aspect of modern education. Collecting, as avocational activity, may or may not lead to independent security, depending upon whether the individual is interested in developing his knowledge about the objects collected or whether he is collecting just in order to possess something which other people do not.

The symptom of insecurity in one's avocation is boredom. One may assuage boredom (1) by doubling one's working time, a common form of activity especially recommended by the "successful" business man; (2) by substituting a change in occupation again and again, trying to find "something interesting"; (3) by rationalising—after all, after a "hard day's work" one needs to rest, or "there is no time to do anything after one's day's work is done," "let somebody else entertain me"; (4) by compensating—rather than learn

a skill, just follow a whim or impulse; "let's have excitement." (Boisterousness, rowdiness, and carousing are primitive methods of relieving boredom. This form of avoiding effort is at the root of most delinquency in children. Destructiveness, thieving, trespass, vagrancy in children, are found where no skills have been acquired to occupy leisure time); (5) by sublimation—"all enjoyment is frivolity, all play is sinful." (This method, most noticeable in Puritan New England, still survives in many parts of the world.)

Intimacies must be discussed under two headings—familial and extra-familial—because the individual develops socially in two fields, inside his own family and outside in the community. At first, the familial intimacies of the child afford him ideal dependent security. Through the senses the child accumulates a wealth of experience of a stable nature. Taste, smell, touch, sight, and sound become familiar and form the stable part of the otherwise changeable universe into which the child may retreat. The accumulation of this experience is often overlooked by observers and often misinterpreted. The concepts of "mother" or "parent" are not present at this early stage; any person may serve as the origin of these experiences. It is the *stability* which is important if the child is to feel secure. Later on, as the child explores the experience of independent security, the stability of his familial intimacies becomes less important. He learns to accept the thrill of a new social life.

The child may divide his familial dependence among persons within the family circle other than the mother, father, grandparents, siblings, nurse. He may show a preference for one, usually the one with whom he has had most contact. A child of six months, sitting on his mother's knee among a group of admiring relatives, is bewildered by the array of new faces. One of the

"strangers" holds out her hands, beckoning him to "come to her arms." The child refuses and turns away and clings closer to the mother. The mother is complacently pleased with this evidence of "affection." Where only *one* stranger is present and the child is interested in something new, he may "go" to her on the first overture being made. It is now an exciting game. This behaviour is often described as innate affection for the "mother." It is, of course, nothing of the sort, if this phrase refers to a sentimental mother-attachment on the part of the child. His attachment is rather to the stable and familiar experiences which he has accumulated and which are identified with the person with whom he has had most to do. He has no conception that this person has "given birth" to him.

Later on he acquires many of the tastes, prejudices, and customs of the family, and develops a degree of loyalty depending upon his faith on the one hand and the growth of his independence on the other. Certain artificial factors serve as symbols for his dependent experience—his name, his home, his immediate possessions, such as his cup, spoon, bed, clothes, etc. It is obvious that the relationship between dependence and independence is not a static phenomenon, even though the parents may seek to keep him at an infantile level. In a normally well-cared-for child his independence increases with age and maturity. At some point in his development, usually in late adolescence, the child is no longer fully dependent upon the parents for the acceptance of the consequences of his decisions. This must not be interpreted as suggesting that the child should sever all connection with his parents; respect, dignity, and confidence remain as family ties. The discipline under which he has lived determines whether the child has acquired an adult pattern of dependence or not.

The second child born into a family must go through the same process as his older brother or sister, but his position is different from the beginning, since, from birth, he must make the adjustment to his own as well as to an older generation. Depending upon the attitude of the parents, the older child may find the younger more or less a challenge to his dependent security. The reaction of the older child to the younger child is often called "jealousy." If this term is also applied to the adolescent pattern, which has a sexual connotation, there is bound to be confusion, because it is most unlikely that, at the age of two, the "jealousy" has any sexual content whatever. Resentment, however, is common to both patterns, because of the threat to the dependent security. The degree of familial dependence varies with the growth of extra-familial dependence ; one is the reciprocal of the other. The sign of familial independent security is acceptance of extra-familial associates. The outside association gratifies the wants related to specific appetites, emotions, and attitudes. (See Chapter VIII.) The cavalier manner in which the children of this age associate with or dispense with extra-familial companionship shows its independent nature and hence its value in acquiring emancipation.

The companionship of later childhood is a complicated process which we cannot go into fully here. It must be urged, however, that the "companions" of a two-year-old, a five-year-old, a nine-year-old, a twelve-year-old, and a sixteen-year-old are quite different, although they may, in certain circumstances, be the same *person* throughout this whole age period. At various ages "companionship" gratifies different wants. Two sixteen-year-olds find quite a different set of wants gratified from those of two sixty-year-olds. The relationship between two persons depends on the growth of their

independence and the emancipation from parental dependent security.

Often a child of twelve years may associate with a two-year-old. She acts towards it as a "mother." If she is satisfied with this relationship, we suspect retardation of her social maturity. After, or during, puberty the anticipated gratifications of companionship are entirely different from any that have appeared before. Later, following upon his growing emancipation from the family, the child must seek an extra-familial intimacy which provides the dependent security which he has lost by his emancipation. This begins roughly at the age of about twelve years in the average child, but depends a great deal upon community organisation. Through the Boy Scouts and the Girl Guides and other such community groups the child is provided with an opportunity to practise the habits of accepting insecurity and seeking new dependent agents. The companions of this age seldom survive into adult life. He may choose, at an older age, sixteen to eighteen years, a mother-substitute or father-substitute. In that case he has not developed independently, but is looking for the same refuge in these individuals as he found in the parent. If he is emancipated, he looks for qualities that will give him dependent security, but in a different fashion. He is looking for someone in whom he may confide ; with whom he may, because of his faith, feel confident that his revealed ambitions and his shared day-dreams will not be betrayed ; whose interests are to some degree similar and hence interesting ; whose experiences are also different from his own and hence exciting. Such extra-familial intimacies, at first, may develop between companions of the same or opposite sex. But, later, he will seek, in the opposite sex, the satisfaction of the appetite of sex under the rules and regulations of society, if he has been adequately trained to conform.

Deputy agents which are ineffective tend to develop such traits as suspicion, shyness, prudery, lack of self-confidence. These patterns make it difficult to acquire extra-familial intimates. It should be apparent that the qualities which one should seek in the mate selected as the permanent life-companion are those that make for security in adult life. In a society where other qualities are emphasised by the press, the cinema, and many novels, it is not to be wondered at that there is often disillusionment after marriage.

The development of more mature social patterns has been very briefly touched upon in the above chapter. Since we are primarily interested in the young child, the early period has been stressed. During the first five years the child feels dependently secure within the mother's arms and later in the family circle. The tendency to regard this early age as wholly dependent and to disregard the necessity for beginning emancipatory training is deplored. In the following chapter the "training for responsibility" is discussed in greater detail.

CHAPTER X

DEVELOPMENT OF RESPONSIBILITY

THE most frequent criticism levelled at youth is "irresponsibility," which is obviously unfair. Irresponsibility is the result of lack of training, not a function of chronological age. A child who grows up without having an opportunity of practising "responsibility" suffers a disability in the same way as a child who grows up without musical training is unable to play an instrument or appreciate this art. Oftentimes the relationship between chronological age and the necessity for accepting responsibility is confused; for example, the privilege of voting at the age of twenty-one years does not, *ipso facto*, confer upon the individual the judgement deemed adequate for exercising this function. Training in responsibility should not be put off until the child is considered "old enough," but should begin at birth.

At every moment of experience the individual must select a specific action pattern. There is always at least one alternative to the act which has been selected. A child may cry or not, sleep or not, move or not, and so on. From the beginning of his life there are situations in which a child may be *taught* to choose and accept the consequences of his choice. Responsibility may be defined as the habit of choosing, and accepting the consequences of the choice of behaviour. Whenever a child is considered to have developed or acquired sufficient experience in anticipating the consequences of his acts, he should be expected to accept these consequences. If his behaviour shows that he *cannot*, then the opportunity for choice should be deliberately withdrawn. If, on the other hand, his behaviour is interpreted as an *unwilling-*

ness to accept the consequences, then responsibility should not be withdrawn.

As pointed out in Chapter V, eating is one of the most effective fields in which acceptance of responsibility may be learnt. * When a child has learnt that eating satisfies hunger, he may then be expected to choose whether he will eat or not upon any particular occasion. He cannot be expected, at this stage of development, to decide *when* to eat nor *what* to eat. These responsibilities rest with the parent, and cannot be delegated to the child until he has learnt the consequences of his choice.

Soon the child may choose whether he will continue to cry or bring his musicale to a close. The responsibility for interpreting the cry rests with the parent. Is the child in pain, bored, hungry, uncomfortable, or what? Bedtime for the child is a parental responsibility. Whether the child shall sleep or not is the child's responsibility. The ultimate aim of training is to teach the grown-up child to accept full responsibility for *all* his actions. The age at which this aim is fulfilled depends, largely, upon the efficiency of the training programme. Chronological age may, or may not, be indicative of the learning stage.

Training the child to make adequate choices is commonly called "training in decision." Ordinarily, we think of the making of a decision as a relatively rare phenomenon. We think that we *decide* only when a decision seems to be difficult and of relatively major importance. Psychologically, decision or deciding is a continuous process. An individual must act at any moment and, having at hand alternative activities, every act is the result of a decision of some sort. But since, in the course of the child's life, many situations occur over and over again in which the same decision is made, the

mechanism becomes automatic and the individual tends to overlook the fact that he is actually making a decision. Some people jump out of bed in the morning "automatically" when called or when the alarm clock rings; others find it the most difficult "decision" to make every day.¹

An example of a "major" decision may be given as follows. A child of twelve has been permitted, for the first time, to choose a new dress. First of all she projects herself into the future as having made the decision; in other words, she pictures herself as "wearing the dress" or "not wearing it," and draws upon her past experience to predict the consequences of her choice. Will it suit her? Will others appreciate it? Is it too daring? Will she be laughed at? Upon what occasions can she wear it? Is it in style? Is it old-fashioned?, and so on. She must answer each of these questions as best she can. Then she asks herself whether these consequences are *acceptable* or not. If so, she accepts the dress. If not, she chooses another. As this is her first experience of this kind of choice, she will be torn between the acceptable and the unacceptable consequences. This experience of vacillation is inevitable during the making of a decision that has not become automatic, otherwise the decision would not be difficult to make. At this age the responsibility for choosing the cost of the dress and the durability of the material rests with the parent, because this aspect of the choice is not within the scope of the child's maturity. Having chosen the dress, the child must wear it, and then she will discover whether the predicted consequences correspond to actual experience. Undoubtedly there will be a discrepancy between the two, because no one

¹ Cf. Lytton Strachey, *Eminent Victorians* (1918, London), page 178. In writing of Dr. Arnold he states, "His dislike of early rising amounted, we are told, 'almost to a constitutional infirmity.'"

can predict infallibly the consequences of any decision. It is with respect to this discrepancy that the training is most important, because usually, at this point, the child wishes to avoid the consequences of her decision. She may find that her companions laugh at her. The parent must now use tact and consistency in dealing with the situation. The one thing she must *not* do is to exchange the dress or buy the child another one in its stead.

After the parent has decided that the child must accept the responsibility, she should not interfere with the choice, unless asked for advice. There is a difference between advice as an "authority" and advice as a "command." In the former the mother tries to help the child in predicting the consequences; in the latter she is denying the child the privilege of choosing. It is advisable to train a child to use authorities, but in a restricted and specific manner. Obviously, when a decision is difficult to "make," the fault lies with the paucity of past experience and the decider may enquire from any available source what may be the consequences of the decision. The authority may be a parent, a book, a colleague, a companion, and so on. Such authority is a source-reference and should never be used as an alibi by the chooser. In other words, the decider accepts the responsibility for choosing the authority. If the authority gives information that later is proven inaccurate, the decider must still accept the consequences of the decision made under the opinions of that authority and cannot foist the consequences upon it, but of course will be wary of using that source in future.

Thus, if the child asks the mother whether she thinks she should take dress A or dress B, the mother may say, "They are both within the price-range that I have decided and both of them are durable. Either one is suitable."

If the child says, "Which colour becomes me the more?" the mother may say, "I like you in blue, but then other people may not; and as you are not trying to please me alone, you must not let that be the deciding factor."

The child says, "Well, do you think the other children will like A or B?"

The mother replies, "I don't know. You are better acquainted with the kind of dresses your friends are wearing,"—and so on, so that the child, when later experience proves her decision to be in accordance with the consequences or not, cannot blame the mother for having made her choose the dress (nor can the mother, later, take the *credit* for the choice).

Some years ago I happened to be travelling on rather a long journey. In the observation car, on the second morning, a young mother and a two-year-old child were sitting, and it was obvious that both were finding the journey rather trying. The child was sitting next the mother, cutting paper with a small pair of scissors. Soon bored with this, she started to poke the scissors through the space between the seat and the back. The mother said, "Don't do that, darling. You will push the scissors in there and never get them out again." The child looked interested and poked the scissors into the crack. They disappeared, but she got down and went round to the back and found they had fallen through the crack on to the floor. She picked them up and, in great glee, showed them to her mother and said, "See, Mummy. No gone." As an "authority," this mother, for the time being, was a wash-out.

Investors refer to statistical tables as authorities, physicians read books on surgery and medicine, scientists use texts and journals, but always to refine their knowledge of consequences, never as a justification for their own inadequacies.

There are many ways in which one may try to avoid the consequences of making decisions, the most common of which is to postpone a decision, called procrastination. From our discussion of security one may recognise that, in making a decision, an individual, during this process, is relatively insecure ; he is said to be in an "anxiety" state. Insecurity is an undesirable state of mind. Action, because it involves belief, resolves the previous doubt, and the individual, having decided to accept the consequences, becomes secure again. Some individuals try to avoid making decisions in order to avoid the "anxiety." Such persons attempt to make their lives a series of automatic decisions, and are disturbed if anything distorts the routine of the day. Such individuals are liable to compulsive acts. Undue emphasis upon tidiness, punctuality, or cleanliness may foster such states.

Another common method of avoiding "anxiety" is to have someone else decide. There are some persons who cannot "shop" without a companion. Children whose parents make all their decisions for them cannot learn to accept the responsibility, but must seek some alibi.

Some decisions can never become automatic, or seldom become automatic, such as deciding to get married or deciding to buy a house, because, in the ordinary course of life, these do not occur frequently enough for an automatic decision to be made.

From the point of view of child-training, there are several points to be emphasised in this connection. First of all, the development of judgement (which may be defined as the use of past experience to anticipate consequences) can never become perfect, only refined. It develops only through practice and not through precept. Secondly, the development of values, namely, that some decisions are more significant than others, proceeds slowly. The child should learn that the relatively unim-

portant decisions should be made automatic as soon as possible ; hence the importance of routine training in early infancy. Thirdly, the child should learn that it is far more important to accept the consequences than it is to predict them accurately. In fact, he learns to appreciate the paradox that the more difficult it is to make a decision, providing that one has explored the consequences adequately, the less does it matter which alternative the individual accepts. Fourthly, having learned to accept the consequences, the child comes to appreciate that the making of decisions becomes a thrilling and adventurous aspect of living and not one to be avoided. A child who begins to acquire such an attitude towards deciding, grows up to be a leader of the type mentioned in Chapter VIII.

Training in the acceptance of responsibility is perhaps the most important function which the parent and teacher have to perform. A quasi-responsibility does far more harm than good, as witness the types of student government which, from time to time, have been introduced into schools and into homes. Usually in such situations the immature individuals are deceived into believing that they have more responsibility than is the case. When a crisis occurs, the parent or faculty usually steps in and makes the decision arbitrarily. If this occurs, either too much responsibility has been given or too little has been permitted.

WORK AND PLAY

"MEN must work and women must weep." "All work and no play makes Jack a dull boy." It is no wonder that, with such aphorisms continually before him, the average child looks upon work as an unpleasant result of Adam's defection, and regards any device to avoid work, for as long a time as possible, as justifiable. To be sure, even a casual study of industrial conditions during the latter half of the nineteenth century, which have not been wholly alleviated, seems more than to justify this attitude on the part of the child. The average individual, if asked to define work, usually does so by using such words as "drudgery, force, tiring, monotonous," and so on; play, he may describe in words which are the antithesis of these descriptive terms.

In this book the child is regarded as an *active* individual who ultimately must contribute a portion of the products of his activity to the general good, while the remainder, the fruits of his leisure time, may be devoted to his own interests.

The child is destined neither to work nor to play; he is destined to be active. Before a plan of training may be drawn up, certain postulates must be accepted. (1) Activity primarily satisfies the appetite of change. (2) Fatigue is the necessary accompaniment of all activity, and can be assuaged only by rest. (3) Activities may be classified as "approved" or "disapproved." (4) In a democratic State, each individual should contribute some part of his effort to the community welfare. The significance, for the educator, of these postulates is as follows.

(1) It is far more important to develop an interest in

persistent attack on a problem than to emphasise the nature of the task. The curriculum is less important than the method used for motivating the child. As indicated above (Chapter VII, 2), the activity, under suitable conditions, is identified with the goal and becomes intrinsically gratifying. By arranging the educational programme to fit into the requirements of the appetite of change, a habit of "busyness" is inculcated, since activity accompanies all learning. If activity is looked upon as interesting, then the child will later benefit from the early fixing of such a habit. Repetition, or practice, which is necessary to acquire a greater degree of skill, is not looked upon as "drudgery" but as part of the total plan. Very young children repeat an activity pattern over and over again—for example, taking all the blocks out of the box and putting them all back again. A "self-imposed" task indicates a "self-appreciated" goal. A child learns in these early years that repetition and practice are necessary for efficient behaviour, that the degree of skill is a matter of his own choice, but that the greater the skill the more gratifying the activity.

(2) The onset of fatigue may be recognised by increasing inefficiency, which is accompanied by irritability in the child. Arrangements should be made so that periods of activity alternate with periods of rest. A routine is very important for this reason. The midday rest, for children, often prevents the emotional episodes of the later afternoon. The child should be encouraged to relax, so that he need not be "busy" all the time. Boredom is the consequence of lack of "busyness," and if the child is supplied with an adequate variety of materials, he will not permit boredom to endure for long. He is more likely to busy himself to the point of fatigue if he is not safeguarded by a regular rest routine.

(3) The activities of a young child are *amoral*. He is

neither naughty nor virtuous, but he must learn that certain activities are "disapproved" of by adults. Boisterousness, destructiveness, and social interference are undesirable behaviour patterns. These are all due to boredom. When the child is bored, he desires a "change." If untrained, or thwarted by lack of new material, he acts impulsively; "anything for a change." Children do not, as is often thought, "pass through" a phase of destructiveness. The adult interprets such behaviour from *his* point of view. The child bangs the doll on the floor and cracks off a limb; the boy takes apart the mechanical toy; the child picks the wallpaper off the wall beside his cot; the girl cuts holes in the counterpane with the scissors; the small boy throws over his big brother's meccano-built bridge. These are not "wilful" acts of destruction; they are, rather, signs that the child has been deprived of suitable material to manipulate into new forms, shapes, and uses. A boisterous child, as opposed to a vigorously acting child, is an unskilled child. He changes the environment by careering around and shouting in an undirected manner. The child who interferes with others by pushing, poking, teasing, snatching, etc., has not learned to enjoy the activity of self-directed plans. He wishes to be "entertained" rather than to be interested. In a well-managed Nursery School it is very seldom that an article of equipment is destroyed by a child; an article is often broken (*a*) because the child is trying to use it in an original manner, which is reasonably to be expected and to be encouraged (necessity is only the *mother* of invention, not the father), and (*b*) because most of the equipment manufactured for the use of the child is too frail in construction.

(4) It is idle to expect a young child to think in terms of a "job." Much too soon this sword of Damocles is held over his head. If, during his early years, he learns

to accept responsibility for his own activities, later the spread of this responsibility to community affairs will follow. Washing, dressing, setting the table, tidying cupboards, etc., are activities which he enjoys without, at this stage, realising that the attitudes he is developing will later be called "civic duty." To be sure, when he grows up, he must "earn his keep," but provision for this activity is not the only responsibility of his educator. If a child has learned to be interested, he will have developed several groups of skills, not only one (i.e. reading, writing, and arithmetic). He will offer one of these skills-groups to the community, for which he receives, in return, his salary. The other skills remain as leisure-time activities. Those who are planning the future democratic State would find it far easier to regulate employment and unemployment if all children were trained in this fashion, rather than, as today, trained for a specific job, and if the market shrinks, they find their skill unsaleable.

It is as well to keep in mind that children possess no special capacities—nor are we seeking to develop, at this early stage, any special abilities. We are attempting to provide an opportunity for each child to develop some degree of skill in as many types of activity as are within his capacity to develop. The brighter child will become interested in more skills than the dull child, but a number of skills can be developed in all children. The philosophy of training in some of the skills will now be briefly described. All children between two and five years of age should have an opportunity to explore these fields of activity.

(a) *Musical Training.* The goal of musical training is not to train the child to become a professional musician. It is possible to enjoy any activity if one attempts to develop a skill. The enjoyment is commensurate with

the degree of skill. In learning an activity a child should not be thrilled at circumventing a rule, but rather in using the rule as a device for developing the specific skill involved. Restrictions are not always unpleasant—rather the reverse if the individual wishes to accept them. Certain rules are arranged within which an activity must remain, and if a child learns to accept them, his enjoyment is enhanced.

Rhythm dancing is an activity in which there is such a restriction, although not usually considered as such. A child must move in conformity to a musical beat. The capacity to correlate muscular activities to a definite auditory rhythm is present in very young children. When the child *learns* to correlate his muscular activity with auditory perceptions, one can observe the satisfaction which he takes in the acquisition of this skill and in participation in this activity. His opportunity for uninhibited rhythm is not restricted in the playground, but in the "music-circle" his activities are expected to conform to the musical tempo. A portion of each day should be devoted to this training. It must be stressed, however, that the teacher should not be interested in the degree of skill which a child acquires, but that the child set his own standard of skill. The teacher will assist, if necessary, or if requested, to make the child understand how best he can accomplish the task, but will not be disappointed if the child fails to approach an adult standard.

Singing is a more complicated skill, because the child must not only conform to a rhythm, but must approximate a melody and memorise the words. It is still more difficult because it requires the child to restrict not only his larger muscle actions, but the smaller muscles of the larynx must be controlled and the proper word must be fitted into its place in the sequence. Again, the teacher should not be interested in making the child into a

prima donna or an impresario. He hopes rather that the child may enjoy singing all through life. With young children the singing should be accompanied by pantomime, since words are often meaningless, except for their sound. It is easier for a young child to understand pantomime than words, and so finger games and dramatic songs are taught.

The child is next given an opportunity to contribute to the musical activity by adding some variations to the production of the music itself. Drums, tambourines, triangles, and so on can be employed; and without undue emphasis upon excellence of performance, the child soon learns not only to assist at the rhythm, but to appreciate himself as a performer in the total sequence of the entertainment.

A great deal has been written about musical talent. The general consensus is that children are either born with musical capacity or not. The writer holds an opposite opinion. All children are born capable of developing musical ability (even a deaf child may appreciate rhythm). The adult who states somewhat complacently, "I haven't any music in me at all," is merely saying that he either (i) has never had an opportunity to learn, or (ii) has never been interested. He would not so complacently say, "I can't read," and yet reading and musical skill are learned in exactly the same fashion. It is far more important to teach every child to appreciate and participate in some musical skill than to teach every child to "do long division." After all, one only rarely finds the multiplication table a comfortable refuge when one is bored. All children can learn musical skills to some degree; the most intelligent and the most interested and persistent achieve a degree of skill which we all acclaim. Musicality is not a gift, it is an achievement.

(b) *Books and Pictures.* The age at which a child learns that spoken words can be used to assist in imaginative thinking is not accurately known. There must be wide individual variations, but as soon as this stage has been reached in a child, the telling of stories about pictures is not only an interesting but a helpful method of training.

It is important to know the span of attention of the children under the care of the teacher. A story to the two-year-old child should not take much longer than ten minutes. The average adult is prone to attempt to tell stories to children which are of a fictional variety and attuned to an older listener than the child. Children at the age of two are amassing a fund of new experiences and are far more interested in what, to the adult, may appear commonplace: the tram on its way down the street; the coal being delivered at the door; the telephone ringing and the subsequent conversation of a one-sided variety; the cooking of the family meal,—these are, at the age of two, still matters of interest. Repetition is not only necessary, but is welcomed by the child because, (i) memory being short, the repetition is not yet boring, and (ii) the stability of the known and familiar supplies a comforting background to the novelty of the unfamiliar but exciting terms of experience.

A child of two years of age is interested in looking at pictures, provided that the pictures are simple and not complicated. One object in every picture, whether it be a cow, a horse, or a "puff-puff," is all that is necessary. Picture-books should be sturdy, because the turning of the pages is a form of repetitive activity which appeals to young children. The turning over of the page, accompanied by the sound, is a gratifying form of activity. Learning to turn the page without tearing is part of the training plan. (Tearing, of course, is interesting to the

child because it presents a novel type of sound experience.)

Later, at the age of three and four years, the story-telling becomes a little more fictional in character, but this characteristic is added to the experience largely in the nature of fantasy, rather than of a highly developed plot. The outstanding story written for this age is "Little Black Sambo," in which the author has combined a story of everyday routine, dressing, eating, walking, etc., with a fantastic exaggeration and impossible ending, which appeals to every child. It is surprising that there are so few stories which have the appeal of this masterpiece. Children of this age are, above all, too young for "Arabian Nights" and many of the fairy-tales. "Goldilocks and the Three Bears" is a favourite because it, too, impinges directly on the daily routine.

The picture-books for the age of five may be a little more complicated and may present a *story*, rather than a single object. Teaching the child to care for books should be a task within his capacity. A book carelessly handled by the child should be taken from him.

A list of approved story-books for Nursery School children is given in Table 6.

TABLE 6
CHILDREN'S BOOKS
(Used in St. George's Nursery School) ¹ —

PICTURE-BOOKS

A Book of Steamers	Blackie & Son, Ltd., Great Britain.
A Book of Many Motors	Blackie & Son, Ltd., Great Britain.
The Big Book of Engines	Blackie & Son, Ltd., Great Britain.

¹ This list is taken from *Nursery Education, Its Theory and Practice*, and mentions the American publishers. Many are published in England as well.

All Round the Farm		Blackie & Son, Ltd., Great Britain.
Throughout Field and Wood		Blackie & Son, Ltd., Great Britain.
Home Friends		Blackie & Son, Ltd., Great Britain.
The First Picture- book	by <i>M. S. Martin</i>	Harcourt, Brace & Co., New York, 1930.
Baby's First Book		Saalfeld Pub. Co., Ltd., U.S.A.
On Our Farm	by <i>J. Y. Beaty, J. C. Allen (illus.)</i>	Saalfeld Pub. Co., Ltd., U.S.A.
Forest Friends	by <i>F. N. Shank- land, F. B. Peat</i>	Saalfeld Pub. Co., Ltd., U.S.A.
Baby Animals	by <i>D. Thorne and F. B. Peat</i>	Saalfeld Pub. Co., Ltd., U.S.A.
We Go to Nursery School	by <i>M. Poppleton and W. E. Blatz</i>	Wm. Morrow Co., New York.
The Real Picture- book Selections		Rand McNally & Co., Ltd., U.S.A., 1929

STORY-BOOKS

(2 YEARS TO 5 YEARS)

The Three Little Kittens	<i>Peter Rabbit Series</i>	M. A. Donohen & Co., U.S.A.
The Three Bears	<i>Peter Rabbit Series</i>	M. A. Donohen & Co., U.S.A.
Little Black Sambo	<i>Peter Rabbit Series</i>	M. A. Donohen & Co., U.S.A.
Old Tales Retold	<i>Volland Edition</i>	
Angus and the Ducks	by <i>M. Flack</i>	Doubleday, Doran & Co., U.S.A.
Angus Lost	by <i>M. Flack</i>	Doubleday, Doran & Co., U.S.A.
Peter Rabbit	<i>Peter Rabbit Series</i>	M. A. Donohen & Co., U.S.A.
This Little Pig	by <i>H. and A. Evers</i>	Farrar & Rinehart, New York, 1932.

(3 YEARS TO 5 YEARS)

Ask Mr. Bear	by <i>M. Flack</i>	Z. Wilkinson Co., New York, 1932.
Millions of Cats	by <i>Wanda Gag</i>	Coward McCann, New York.
The Selfish Fox	<i>Peter Rabbit Series</i>	M. A. Donohen & Co., U.S.A.

- | | | |
|---------------------------|---------------------------|--|
| Butterwick Farm | by C. Webb | F. Warne & Co.,
London, 1933. |
| Social Science
Readers | by H. S. Reade,
E. Lee | C. Scribner's Sons,
New York, 1931. |

(4 YEARS TO 5 YEARS)

- | | | |
|---|-------------------------------|--|
| The Runaway Sardine | by E. L. Brock | A. A. Knopf, New
York, 1929. |
| The Twins and
Tabiffa | by C. Heward,
S. B. Pearse | G. G. Harrap & Co.,
London. |
| Grub—his Tale | by D. Faber,
A. Wright | Faber & Faber,
London. |
| The Greedy Goat | by E. L. Brock | A. A. Knopf, New
York, 1931. |
| The Story about Ping | by M. Flack,
K. Wiese | Viking Press, U.S.A.,
1933. |
| The Art Book | by F. Derrick | Blackie & Son, Ltd.,
London. |
| This is the Book | by J. Smalley | B. Blackwell, Eng.,
1928. |
| My Bookhouse
Vol. I. In the
Nursery | by O. Beaupré
Müller (ed.) | The Bookhouse for
Children, Chicago,
1925. |

(Additional List used at Garrison Lane Nursery School)

JUNIOR

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|-------------------------------------|-------------------------------------|--|
| Hello, Judy | by C. Becker | C. Scribner's Sons,
New York, 1941. |
| The Baby Car | by L. Lenske | Oxford University
Press. |
| Saturday Walk | by E. Wright | Wm. R. Scott, Inc.,
New York. |
| Another Here-and-
Now Story-book | by L. Sprague
Mitchell | E. P. Dutton & Co.,
Inc., New York. |
| SENIOR | | |
| Told Under the Blue
Umbrella | Assoc. for Child-
hood Education | Macmillan Co., New
York, 1940. |
| The Three Billy
Goats Gruff | by A. O'Grady and
F. Throof | Rand McNally & Co.,
Chicago. |
| Copy Kitten | by H. and A. Evers | Rand McNally & Co.,
Chicago. |
| Pokey Bear | by H. and A. Evers | Rand McNally & Co.,
Chicago. |
| Ezra the Elephant | by M. Barrows | Grosset & Dunlap,
New York. |
| Zozo | by H. A. Rey | Chatto & Windus,
London. |

Eight Nursery Tales	<i>Edited by Watty Piper</i>	Platt & Munk Co., New York.
The Story of Ferdinand	<i>by Munro Leaf</i>	Hamish Hamilton, London.
Caps for Sale	<i>by E. Slobodkina</i>	Wm. R. Scott, Inc., New York.
Willy Nilly	<i>by M. Flack</i>	Macmillan Co., New York, 1939
Bonny's Wish	<i>by R. Gay</i>	Grosset & Dunlap, New York.
Patsy Podger and the Chilly Scarecrow	<i>by J. Ford</i>	George G. Harrap & Co., London.

(c) *Manipulative Activity.* The most important provision for children during the first five years is an opportunity for developing the skill of the finer musculature of the hands in manipulating the various media which are available. It is possible to select such media adapted to any degree of skill, from the blocks with which the child builds a new form, to plasticine, moulded by an older child. Any medium which the child can change is satisfactory. The change may be infinite in form, colour, design, and "usefulness." Here, again, the teacher should not try to develop a skilled artisan, but to stimulate the child's interest in his own efforts. The end-result is unimportant to anyone but himself; the activity is the more enjoyable aspect.

Blocks, paints, plasticine, clay, wood, hammers, saws, finger-paints, sand, paste, scissors—these are the "tools" for the development of skills.¹ A period of the day should be set aside for this activity and a routine should be established, so that the child does not go from one to the other in an undirected manner, but uses the material during the time that his attention is arrested and then changes to another activity at his own inclination. It is with reference to the arrangement of this routine that the Nursery School is considered so necessary for child education.

¹ Cf. Susan Isaacs, *The Nursery Years* (Routledge, London), Chapter VIII, "Playthings."

DEVELOPMENT OF SPEECH

THE relationship between an organism and its environment is essentially a form of communication. All living organisms are in constant communication with their immediate environment. Through the senses, communication is directed from the environment to the organism. The behaviour of the organism, in response to sense activity, establishes communication in the opposite direction. Thus communication is a two-way phenomenon and should be considered "inter-communication." When the old bull-moose bellows his challenge to other adversaries, he is communicating with his environment; so also the kitten which leaps in the air and runs, in order to entice its fellow-kitten to the chase. The use of a behaviour pattern deliberately to change the immediate environmental situation is a long step in the evolution of communicating activity. Whether the moose or the kitten appreciates, upon the first attempt, that his immediate want will be fulfilled is a matter for dispute. But in the course of time they certainly learn to anticipate the consequences of their behaviour. The future reference of immediate activity is exceedingly important to the success of further learning. Mental development is governed by the extent to which an organism can project the influence of his activities into the future.

The bellowing and the leaping are *direct* methods of communication. In addition, the organism must learn to employ indirect methods of influencing his environment. The deliberate use of an indirect technique is the basis of the development of language. Thus language may be defined as the deliberate use of an indirect form of response for fulfilling a want which

may or may not otherwise be gratified by more direct action.

Language, then, is an economical device for conserving energy. The muscular effort in language is much less than in pulling or pushing or snatching, etc. The sounds must impinge upon the sense organs of the organism to be affected; hence, language is a device futile for affecting inanimate objects. (This differentiation must be learned by the child, who may, during the period of learning, make some rather comical mistakes, such as asking his teddy-bear to "open your eyes.") Language must imply a deliberate intention on the part of the user. He may employ an action which affects sense organs of the recipient other than hearing. Opening and closing the fingers into a fist may mean, "I want that . . .," and affect the vision of the recipient. These behaviour patterns are called "gesture language." The sense of touch and kinæsthesia may also be affected. A nudge calls the attention of the recipient to an incident he is asked to observe; a shove may indicate the desired direction of travel, etc. Gesture language appears earliest, both in the individual and presumably in the racial development of language. "Gesture" language has several disadvantages. It requires that the individual to be affected must be within range of touch or vision, also it has a local reference and cannot become widespread. Spoken language develops when the advantages of "sound" are appreciated.

It is not necessary here to enumerate the many theories of the origin of spoken language. There was undoubtedly, in the beginning, a good deal of overlapping between gesture and spoken language, as can be observed today in a young child. Gesture and speech are seldom divorced. (Ask a friend to define "a spiral staircase.")

The higher animals, which possess a larynx, vocalise.

Whether such activity should be called language is a matter of definition. Vocalisation is a muscular response similar to walking, flying, or swimming. When vocalisation is used deliberately to affect the behaviour of others, it may be called language. The first cry of the child at birth cannot be considered language. The casual singing of birds, the croaking of frogs, and the tympani of the cricket are *probably* not language devices. The possession of a larynx does not necessarily determine the development of a spoken language. The laryngeal development of the higher apes differs from the human being, but not so radically as to rule out the possibility of language development. Perhaps the higher ape does not talk because *he has nothing to say*. The "talking" of a parrot is, of course, not "language" according to our definition.

Most young children develop a rather complicated system of gesture language. Since it is developed in a narrow social environment, it is usually of local character and understood properly by only a few people and often only by one, namely, the mother. Twins usually develop a more complicated gesture language, understood by themselves alone. In our study of the quintuplets,¹ the degree to which a gesture language was developed among the five sisters was strikingly apparent. Obviously the desire to communicate is determined by the motives in operation. As long as the motives of the individual are satisfied by gesture, there is no incentive to develop a more complicated device. When the individual discovers the limitations of gesture and the unique efficiency of vocal speech, he begins to learn to speak.

Vocalisation, as such, may be classified as an instinct (see Chapter V). The vocalising structure is physically relatively simple, although it is complicated physiologic-

¹ Cf. "The Development of Language in the Dionne Quintuplets": *Collected Studies (ibid.)*, 1938.

ally and anatomically. The so-called vocal "chords" are stretched across the opening into the lung cavities. Air, passing to or from the lungs, will set these chords vibrating, according as they are made taut or not by the muscles which operate them. The degree of tension is controlled by this set of muscles, which are bilateral, that is, a similar set operates each half of the larynx. The two sets, right and left, must act in unison to be effective. The tone of the sound which emerges is determined by the tension of the chords. The tighter they are pulled by the muscles, the higher the note which emerges. The resulting sound, passing out through the mouth and the nose, may be modified in two ways. First, whatever the original *tone* (which is always a complex one—never the true tone of a tuning-fork), some parts are emphasised or diminished by the passage through or alongside the resonators which the individual possess. A resonator is an instrument which picks out from a complex tone a particular wave-length which it emphasises. The individual's head consists of a system of resonators, especially the mouth cavity, the nasal cavity, and the sinuses. The muscular and bony chest cavity also affects the nature of the sound. The final tone which emerges is pleasing or not, depending upon the cultural standard of the community. (See Chapter VII, 3.) A high-pitched voice, a tenor, soprano, baritone, or basso-profundo are partly dependent upon the physical structure and partly upon deliberate modification by muscular action. Sometimes a physical condition affects the tone; e.g. if one has a head cold, the sinuses are obstructed and the resulting tone is altered by the change in resonance.

It can readily be seen that, given a wide variation of inherited structure, some individuals are born with a resonating mechanism which makes it relatively easy for them to please others. This has led to the widely accepted

view that some people are *born* singers. But it is obvious that a skilled singer must *learn how* to please. No child becomes a singer by inheritance. It is possible, through training, to modify the emphasis of the resonance in any direction. The difference, however, between female and male voices is a structural difference depending upon the alteration in the larynx which occurs during puberty, which is more apparent in boys than girls. Whether the peculiar effects produced by a crooner are due to an abnormal tonsillar growth or not is unknown to the writer.

The second modification of the sound made after it leaves the larynx is an alteration in time-sequence. By the use of lips and tongue, the tone may be interrupted in various ways. Thus, if a tone is emerging and the lips previously tightly closed are suddenly opened, the tone takes on an explosive character. If the lips are not tightly closed, the explosion is not so intense. If the sound emerging from the larynx is "aw," an explosive interruption will sound like "paw"; and if the lips are not too tightly closed and not too suddenly opened, the sound is "maw." A repetition of this activity results in the sound series "maw-maw-maw-maw." Since a sound halfway between "aw" and "ah" is apparently the sound most easily produced by an infant larynx, and the soft opening and closing of the lips is not only a simple muscular pattern but is also associated with suckling, it is not to be wondered at that "maw-maw-maw-maw" is one of the first consecutive series of sounds which the child utters. The wonder should not increase when one realises that this sound "ma-ma" is the sound that is associated with "mother" in many languages, because the mother selects this sound and repeats it so that the infant hears it.

But we are ahead of our story. Providing the child is born structurally normal, he may vocalise within very

wide limits. The whole scale of his vocal chords stretched to varying degrees produces innumerable "tones." The interruptions produced by tongue and lip are infinite in variety. The study of early sounds in the young infant defies accurate recording. The child, first experimenting with vocalisation, satisfies the appetite of change. (See Chapter VII, 2.) This is a non-language stage of activity. An attempt to record the sounds of the child is baffled by lack of sufficient symbols. Even a philologist, skilled in many languages and alphabets, would hear vowels and consonants for which he had no recording symbol. For this reason the exact number of such separate vocalisations cannot be accurately recorded. Certainly there are more than two hundred of them. In order to learn a language the child must be able to "hear" not only others, but also the sounds he himself makes. The young deaf child does not use as many sounds as the hearing child. (A child is seldom born "dumb.") Learning, as has been pointed out above, is selective, and from the supply of sounds at hand the infant begins to repeat most frequently those which he finds most successful in satisfying his needs. He tunes in on his own vocalisation by listening and corrects in terms of his powers of discrimination. He hears sounds about him, and these serve as models for the final fixation of his speech activities.

At this stage, speech is used as a device for satisfying his motives, and the final result of his experimenting depends upon the success of his attempts. The child will first learn to pronounce, accent, and inflect according to what he hears from those about him, because not only is this a model, but he finds that only if he adopts such a plan will he be "understood."

It is not necessary in this book to go into the various steps which most children take in acquiring spoken

language. There is a definite order in the appearance of the use of words. Nouns come first, then verbs, and so on. Roughly the words used follow a sequence which might be described in terms of the questions which he is asking himself, the order of which is—What ?, Where ?, When ?, How ?, and Why ?

At this juncture it is as well to emphasise again that speaking is fundamentally a muscular reaction. The child learns to speak in exactly the same way as he learns to walk or run or throw. It so happens that the muscular movement of the whole laryngeal apparatus results in a phenomenon which can affect other people at a distance and hence acquires a peculiar ascendancy in the field of action.

Language cannot develop without experience. As well as the actual learning of how to speak, the child must learn what to say. The development of "meaning" in children may be described as follows. The *use* to which the child puts many objects which come under his scrutiny in order to satisfy his needs is the meaning of those objects. Meanings, therefore, are individual experiences. The object does not "possess" a meaning in the concrete sense of the term, but the meaning of any object is dependent upon the use to which an individual puts it. Meanings grow, then, by additional experience. A small glass slide, on which the biologist places a drop of fluid containing some bacteria which he stains and then puts under the microscope, means far more to him than to a child who looks through the microscope and sees a great many coloured spots in his field of vision. The visual field may be identical in both cases. And so with words, which have no *intrinsic* meaning, but as *used* by a child mean something to him.

The child learns to associate a sound with an experience he has gleaned through all the sense channels. The orange

which is handed to the child, accompanied by the sound "orange" pronounced by the mother, is a total experience to the child. He incorporates into this experience an attempt to reproduce the same sound whenever he "sees" an orange. Obviously the experience of an "orange" to the child is different from that of the mother's total experience. There are many "orange" experiences which the child associates with the one sound, so that the child may use this single spoken symbol for gratifying many wants; e.g. he may say "orange" and may mean, "Give me an orange," "There is an orange," "The orange is red," and so on. As a matter of fact, this stage of combining many meanings into one word may be prolonged. Very few people indeed reach the stage of language dexterity wherein they have at their disposal enough words to express the exact meanings which they have in mind.

As we have stated in this book from time to time, there are optimum times at which the specific learning of the child should be stimulated. In connection with "language teaching" it is well to keep in mind that experience must precede enlargement of the vocabulary unless spoken language is to be considered as an art in itself. Language only approaches an art when used in the form of poetry or song. Aside from these arts, spoken language is a *tool* and the individual using it is a craftsman, not an artist. Used as an art, the individual is interested only in satisfying the fundamental motive of change. The first babbling of a child may be considered as an art. As he grows up he discovers a new use for language. He uses this tool in order to make himself understood. He does not realise at this time that a complete understanding between any two individuals is impossible, since such a circumstance would imply *identical* experiences in the two individuals, which can never occur. A close approxima-

tion is the best that can be expected, and he must strive to attain this goal.

The choice and approved sequence of words in a sentence is the next stage to be learned in language development. Many children, because of undue attention paid by their parents to the mere accumulation of spoken words, acquire a large vocabulary. This accomplishment may give the impression that the child is unduly intelligent. Verbosity in a child, due to dexterity in the use of his laryngeal muscles and rote memory, may often be used to occupy the centre of attention in adult society. Proximity in children should be as suspect as in adults.

During the first two years of his life the child learns the basic activities of spoken language. This learning is best accomplished informally, and it is surprising how well it proceeds with the great majority of children. Most children live during this period in an adult-speaking environment. From two years onwards the ideal arrangement for further language experience is a group of children of the same age and at the same period of development, plus a mildly stimulating group of children slightly older in age. This one finds in a Nursery School; the language inter-communication between the children makes for a stimulation of speech which avoids the disadvantages of an adult situation in which there is the usual adult impatience and attempt at approximation to adult standards.

There should be no *specific* stimulation of speech, during the first five years, by formal teaching. That is, there should be no direct attack on the development of vocabulary and syntax. The child's syntax will be a reflection of what he hears, and his vocabulary should be determined by his interests. The telling of stories is the most effective arrangement for furthering language skill, and at three and three and a half years of age story-telling is the

only method which should be formally arranged. Later the child should be provided with an opportunity for telling a story to a group of children. The child's interpretation of his experiences, related to his contemporaries, either interests them or not. If not, they will not listen ; he thus refines his technique under ideal social circumstances.

Lisping and baby talk should be discouraged indirectly. A child should never be mimicked, but occasionally the proper pronunciation of a word may be repeated without emphasis or without demanding perfect pronunciation from the child. The parents are advised to do the same at home.

Stuttering and stammering may appear during this period of training. Skilled advice should always be obtained in such cases. It is impossible to give details of treatment in a book of this scope. The parent and teacher should always show towards such children patient and unhurried attention, making perfectly certain that the child has enough time to make himself understood.

IMAGERY AND IMAGINATION

It is important to distinguish carefully between imagery and imagination. One of the most curious aspects of mental life is the ability to reinstate a previous experience, which may take various forms. In a narrow sense, when a past experience is reinstated in a sensory form it is called an "image." There are various types of such imagery.

(a) The most common is the positive or negative "after-image." If one looks at a bright object and then closes the eyelids, the image persists either as a bright spot in the field of vision or as a dark spot. The former is called a positive after-image, the latter a negative after-image, which is obverse in intensity and shows the complementary colour of the object and background. The positive after-image is seen with the light and colour features, the same as in the stimulating environment. In general, after-images of positive or negative character are usually ignored by the individual, although they are very common in everyday life.

(b) An eidetic image is experienced by the individual who is capable of reinstating, somewhat in the form of a positive after-image, a visual past experience. Thus an individual can look at a picture, and after the picture is taken away he can describe it as if he were looking at it. A summary of the results of study of eidetic imagery is given here in brief. Eidetic imagery is very common in young children, but after the age of six or seven it becomes less and less a part of mental activity and it is said that very few adults retain this capacity. It persists much longer in children of low intelligence. The difficulty, of course, in studying eidetic imagery is

that in those individuals in which it is most apparent, i.e. young children and retarded children, the possibility of introspection is negligible, so that one can never be sure of the actual recall, i.e. whether it is sensory or verbal memory. Most of the work on eidetic imagery has been done in the visual field, but the phenomenon exists undoubtedly in all sense fields.

(c) The third class of imagery occurs when the individual voluntarily recalls a past experience in its original visual form. For example, one recalls the position on a certain page of a particular sentence, the actual words seem to stand out clearly as a visual image; again, an individual states that he can "image" a bowl of roses on a table, although it is not actually there. A great deal of the confusion in the study of imagery arises because the individual misinterprets his "thinking about" an object in verbal sensory symbols with an actual sense experience of the object. Thus it is possible for an individual to describe in minute detail a bowl of roses on a table, which are not there, and to describe the colour, position, odour, movement, and so on, and yet not have an actual visual experience in the form of an "image." In fact, authentic imagery of this sort is relatively rare, although a great many people unhesitatingly profess to have such an ability. They use sensory terms such as, "I can see the accident as if it were happening before me now." The reader is requested to try to "picture" a bowl of roses on the chair beside him. Does he actually "see" it? If so, how does he know it is not there?

(d) The fourth type of image is that commonly discussed under the head of hypnagogic states, hallucinations, and dreams. Hypnagogic states are those which occur just before falling asleep or waking and vague conscious states produced by drugs and in abnormal states of mind. Hallucinations are images which are actually confused

with reality. Dreams are common sensory experiences which, at the time, are confused with reality.

In the case of imagery of the first three sorts, the individual is always aware that it is an image. There is always some cue which the individual interprets, more or less successfully, as the sign of non-reality of the object imaged. In the last type of image the individual often, if not invariably, is confused as to whether the image is real or not.

In human experience there is no such thing as a "pure" sensory experience; there is a response pattern in every moment to total sensory awareness. Furthermore, the total response always includes interpretation of the immediate sense data in the light of the motivating situation. This total phenomenon is called perception. The meaning of the perception is the use to which it is put in order to select the response which is made. Meaning is *use*. At any one time the interpretation may be based predominantly upon the immediate sense data or predominantly upon the recall of past experience, which is never wholly absent at any moment. Every immediate response is based on the interpretation of the present in terms of past experience and with future reference to its consequences. The past experience is represented in consciousness in the form of a kinæsthetic or preparatory act in addition to a sensory recall in the form of a verbal or sensory reinstatement. A sensory reinstatement, of course, is an image. If the image is vivid, there may be some confusion with the sense experience of the moment, and hence the interpretation of the immediate present may be confused thereby. This is a common experience. A brown leaf blown across the floor may be interpreted by a timid woman as a mouse, which she may describe as having a long tail and two little ears, but if the brown leaf is brought to a stop by the wall, she is disconcerted

to discover that it has no tail nor two little ears. This response illustrates how a description of an immediate experience is seldom a faithful description of the actual facts. Human beings are woefully inaccurate. Only after consistent training can a reliable description of an event be forthcoming.

At times an individual can, through the direction of attention, cut himself off from responding to the immediate environment and concentrate upon the past entirely, or nearly so. The child sitting in the classroom can concentrate upon a sunny bank of a stream, where he has been accustomed to fish, and recall, more or less vividly, the sensory surroundings and "see" the ripples on the water and the fish swimming towards his bait. He may become so engrossed in this experience that, in the midst of a quiet study, he may put up his arm and yell, "I've got one!" This child is said to be having a day-dream. Such day-dreams are an attempt to escape from the necessity of conforming to a situation which is not satisfying the motivating conditions of the moment. The child is escaping from reality. His response to the imaged situation, in this case, may indicate that he had experienced eidetic imagery. The term *imagination* may be applied to this experience. The child imagines himself fishing. It is more than imagery, because the individual is responding in an adequate manner to the total situation as imagined. There is image plus meaning.

It is very rare that satisfaction in imagination can be so complete as to divorce the child entirely from his adjustment to the situation in which he actually is living, namely, sitting in the classroom surrounded by his companions and teacher. The child who is busy with mental arithmetic and who has been given two numbers to multiply "in his head" is, psychologically, doing the same thing. He is using his immediate past experience,

having been given the problem which he must keep in mind ; he is using a manipulative response which he has learned in the past, and he closes his eyes to prevent his immediate environment from distracting him and continues until he arrives at his goal, namely, an answer. The motivating situation is different here from the boy who " left " the classroom to go fishing, but the mechanism is the same.

Let us take another case. A child is asked to write a composition or paint a picture or compose a tune. Again he draws on past experience, but here the goal is not to use an experience from the past in the exact form in which he experienced it, but rather to rearrange the details so that the result will be " original." He now deliberately distorts his past experience. The distortion which he accepts must fit into a pattern determined by the goal which he has in mind. He accepts or rejects past elements on the basis of his motivation. If he gives free play to his associations, the result may be fantastic and absurd and they will be rejected. The end-result will be " original," according to his judgement and to the wealth of his past experience which he has at his disposal for rearranging. The originality is often grotesque (and sometimes humorous to the adult who observes the result).

The term " imagination " is applied indiscriminately to the three types of activity which have been described. It can be seen that the three are not quite the same. The first is an escape mechanism, commonly called day-dreaming. The second is a " reasoning " process, and the third is fantasy. The motivation distinguishes each from the other. Each of these will now be discussed briefly with reference to its development in young children.

(a) *Day-dreaming.* At first the young infant must often be confused by the difficulty of distinguishing "sense

data " from " image," especially the eidetic type of image. Refinement of his judgement of reality must be a slow and gradual process, accomplished through experience. Every skill which he acquires assists in clearing up this confusion. The occasions upon which he seems to insulate himself from immediate stimuli are rather frequent. The far-away look in the child's eye, the apparent inattention, may be called day-dreaming, but it must be concluded that these periods may be very useful in clarifying his ideas. After he has learned to distinguish between the real and the imaged, he learns that he can control the latter much more readily than the former. He can induce an environment which, *if it were true or real*, would much more readily gratify his wants. This is the escape mechanism, represented later by " building castles in the air."

It is difficult, at present, to be certain of the progress of this mechanism in children, so little is known of the inner workings of the child's mental life. For example, it is quite common for children of four years of age to have " invisible friends." A young girl, when her nurse sat on a chair beside her, cried out, " Don't sit on Angie," and was relieved when the nurse occupied another chair. Is this a case of eidetic imagery? Is it an escape mechanism? Or is it an illusion or a false perception? We include the phenomenon, in this category, of " day-dreaming," because, obviously, the child is using the device to escape from " being alone." However, it must not be concluded that this is an undesirable pattern. Referring to the discussion on security (Chapter IX), we see that this device is a compensatory mechanism and is not unhealthy at this stage of development.

Another type of day-dream may be illustrated by the child who says (or thinks), " I wish you were dead." A child under five does not understand death in all its signi-

ficance for later years. The "want" expressed in this form merely represents a device for getting rid *temporarily* of a restricting or restraining influence, whether it be mother, nurse, or sister. There is no implication of permanence in the anticipated departure.

Whether vivid imagery is thrust out of the behaviour patterns by the growth of experience, or whether the gradual disappearance of eidetic imagery is a maturation process, is not known. At any rate, it is easy to understand that the persistence of strong imagery is a deterrent to a fuller understanding of reality. Imagery restricts rearrangement, which, as will be seen below, is necessary for reasoning and fantasy.

Day-dreaming is not necessarily an undesirable pattern of behaviour, but when a child, however, through frequent day-dreaming, derives sufficient gratification so that the manipulation of the environment is dull, boring, and relatively unsatisfying, then it becomes unhealthy. The procedure which deals successfully with this development in a child is to see that he has material to deal with. If the mechanism of persistence and developing interest is fostered as indicated above, the occasional refuge in day-dreams is immaterial because the gratification can never be as "real" as in actual performance of a skill. After all, a hypothetical dinner of roast beef, Yorkshire pudding, green peas, mashed potatoes, and ice-cream can never satisfy a hungry man as will mutton, cabbage, and a dry crust eaten from a plate in front of him.

Too much adult approval of trivial skills in childhood often fosters later day-dreams. The first conquest is too easy. A girl of four years old learns to play a simple melody on the piano and is induced (after coaxing) to play for some guests, who (having learned to be courteous) applaud and congratulate. The same girl, at seven, finds her "performance" unappreciated. She says to herself,

"The very same things that sister (aged four) does, and they think *her* cute!" Her day-dream may well be imagined.

(b) *Reasoning*. Finding a solution to a problem of any sort requires a selection of patterns which the individual judges will lead to a correct answer. He must learn to plan an attack. Logic forms the basis of his plan, whether the problem is to be solved by actual trial and error, when he puts his solution to immediate test, or by trial and error on the imaginative plane, where he must use his past experience to judge whether the selected pattern will be successful or not. Ultimately he must put his solution to an empirical test (e.g. look up the answer in the book), unless it is a familiar problem and he "knows the answer."

In young children the foundation of logic is based on "consistency." This aspect of the world is the only important experience for the young child. The anticipation of consequences must precede any logical deductions. Hence the emphasis which was placed, in the discussion on discipline, upon the necessity for consistency in arranging the child's social world. Whether the answer is "right" or "wrong" is immaterial; the child should feel that the method is important, not the result. After all, one cannot always be "right."

One should never "reason" with a young child to influence him to act in a certain way. The child is not interested in logic, but in getting what he wants. If one does not accept "logic," one can "reason" anything to be right. The best procedure is to present the alternatives clearly and let the child choose. E.g. on a cold, rainy day the child wishes to go out to play without mackintosh or goloshes. The mother tries to reason. "But, my dear, if you go out you will catch pneumonia."

"What's pneumonia?" parries the child.

"Pneumonia is when little germs get into your lungs, and you will be sick—very sick—and mother will have to take care of you."

"Don't you want to take care of me?"

"Why, yes"

"Well, then, let me go out."

The better plan is to state, (a) "If you wish to go out, you must put on your mac and rubbers," or (b) "If you don't want to put on your mac, you will stay in, and please hurry because I'm busy," and the child decides and the adult abides by the decision.

In this fashion the child lays down an adequate basis upon which he later builds a "higher" construction which he will call "logical thinking" or "problem solving."

(c) *Fantasy*. In the discussion of the appetite of change (above) it was pointed out that anything "new" was gratifying to the child. The "new" may be experienced in the world about him, but also in the field of "ideas" or "imaginings." When the child learns that he can manipulate his past experiences by recalling and rearranging them into new patterns, he has begun to use fantasy. Since the "new" also may be fearful, he must learn to enjoy the thrill of ideational danger. He learns to be courageous in the field of ideas as well as of actions. The child's fantasies are simple in construction; after all, he has little past experience to manipulate. Later, as an adult, through his skill in fantasy, he adds to the culture, arts, inventions, discoveries of the race. Without fantasy, life would become intellectually and culturally static.

The importance of fantasy cannot be overestimated, and so the training of the child in this skill is paramount. First of all, the teacher must keep in mind the fact that fantasy satisfies the appetite of change and gratifies the fear-challenges of the child. Any direct attempt to

develop fantasy is doomed to failure, because the essence of this skill is its non-restrictive character. Fantasy knows no rules, fits no mould, and obeys no commands. The child explores the regions of his experience and judges his new experiences in the light of his motivation. He learns to distinguish the grotesque, the impossible, the paradoxical, and often the "useful." By "useful" is meant that, at times, he perceives that an unusual idea may apply to an actual problem which he has been trying to solve. He "suddenly" sees the relationship between the fantasy and reality. Archimedes, in his bath-tub, "suddenly" perceived the relationship between his floating and the law of buoyancy. But unless he had been trying to solve the problem, he may have bathed all his life without perceiving the relationship. The "useful" fantasies form the basis of inventions and research.

Thus the child should have an opportunity to "explore." In the early years he must store up experiences, and so he must be supplied with material. He must learn skills, attack problems, and seek solutions. Whether he is successful or not is unimportant.

The child, at first, does not appreciate the grotesque or impossible. He may think of the "moon falling in the garden." He does not reject this as impossible. Why should he?—other things fall. "The cow jumps over the moon" is not "impossible" for the child. He has actually seen a picture of this performance. Care should be taken not to ridicule the child's fantasies. Much of the teaching in the past has stultified fantasy. English composition, art, poetry, design, have been "taught" in so rigid a manner that most children leave school fearful to do or think in any way different from a common type. The wonder is that there has been so much fantasy, not that there is so little. Many in middle life today may recall the art-teacher putting a bowl of fruit on the table and

saying, "Draw this." The results were judged on the basis of photographic identity. A child who painted a lopsided purple orange was disqualified or laughed out of countenance. Cizek showed what may be done if the child is permitted to draw freely under the influence of fantasy.¹

The child learns that fantasy is thrilling. The next step follows when he learns that the fruits of his fantasy, expressed verbally or in action form, attract the attention of others. By means of his skill he becomes an "interesting" person, and can enjoy more interesting social contacts. Unless he learns that he is interesting because he is "interested," he may seek social satisfaction without expending effort, and then becomes a "show-off" or an "exhibitionist." This tendency may be prevented by the teacher who does not unduly *praise*. The showing of class work to the class itself and permitting the group to appraise the efforts of each one is a safe procedure. Exhibiting, by hanging on the walls only those efforts which receive official commendation, stultifies fantasy and discourages originality.

The adult often perceives in the efforts of a child's fantasy a peculiar, grotesque, and humorous aspect, and is prone to laugh at the incident. The child, on first visiting a farm and on being told that milk comes from the cow, asks "Does she make it in bottles?", which may be humorous to the adult; for the child it is not even fantasy. He is asking for knowledge. If the child happens to be the son of the adult listener, it will seem even more humorous and he will regale his friends with this story, often to their amusement, but at times to their boredom.

Fantasy of the inventive aspect is very rare in young children. It is seldom that one finds a child under ten

¹ Cf. Viola, W., *Child Art*, Univ. of London Press, 1942.

years of age who, from his own experiences, develops a "useful" fantasy; the exceptions, which most parents are immediately prone to report, prove the rule. But during his early life the child should have ample opportunity to develop this technique of fantasy untrammelled by rigid rules of "taste" and "cultural pattern." The indoor individual play-period in the Nursery School is designed to stimulate fantasy in the children.

The "lies" of young children are often fantasies, and too rigid an application of the "moral" code may inhibit experimentation. (The "lie" used to avoid the consequences of behaviour is, of course, an "escape mechanism," and is a reaction to inconsistent discipline.)

Imagination may now be defined as a combination of day-dreaming, reasoning, and fantasy. The child is seldom employing one of these patterns to the exclusion of the other two. It is rather a matter of emphasis. All three are useful in the development of well-adjusted behaviour. The adult who uses his "Spanish castles" as an incentive to effort in attaining them, who has learned that logic is a method of procedure and not a device for influencing others, and who has no fear of the ridicule of his expressed fantasies, has developed a degree of independent security unusual at the present day. The aim of education is to train the child towards such an adult pattern.

Obviously, any technique which develops imagination is desirable in an educational plan. Since imagination is based on the development of use and meaning, it is important to provide the child with tangible opportunities for learning about the world. A young child is seldom susceptible to *verbal* stimuli, but must use *concrete* materials. For this reason, young children should have a wealth of materials which they can change in form and structure, and hence in meaning. It is easier to impede than to

facilitate imagination. Ridicule discourages the child ; a rigid goal or model discourages " originality " ; a sterile environment starves the child by reducing the number of past experiences ; undue praise stultifies the process by which the child is continuously striving to rearrange his associations and thereby crystallises his technique—he then becomes, like most of us, another sheep.

CHAPTER XIV

A PHILOSOPHY OF EDUCATION

EDUCATION is a device for shortening the period of learning. As pointed out previously, the invention of writing made it possible for succeeding generations to record permanently the accumulation of human experience. The educator attempts to compress as much as possible of this experience in the time available to youth for learning.

Education is not an active process by which the teacher incorporates her experience *into* the pupils (although this technique is often tried); rather the teacher acts as a catalyser, in that she arranges the environment of the pupil so that the desired experience may become a part of the pupil's life experience. The teacher is also a part of the pupil's social environment, and a very important part. There are two aspects to education, (a) selection of content and (b) method of procedure. The teacher selects the content to be taught, on the basis of her own and the community's attitudes towards certain fields of learning. Thus she may select reading, writing, arithmetic, geography, and so on. These are tangible and concrete experiences. They may be defined accurately and the results of the teaching may be measured in terms of the knowledge of the child revealed by tests, oral or written. There is also a selection of intangible content which can be described in terms of the attitude of the child towards his work, his behaviour in the classroom, and his general social adaptation. It is controversial whether the tangible and intangible content can be taught in the same way, e.g. whether "character" can be taught similarly to "history." There can be no controversy as to whether

both contents are *learned* in the same way or not, since all learning is the same.¹

With reference to educational methods, many of the differences of opinion about this subject arise from the fact that *teaching* is often confused with *learning*. Method is usually discussed from the point of view of the educator rather than of the educatee. Effective learning may be described as incorporating experiences in such a manner that they may be usefully applied to a life situation. The important factor in teaching is the pupil's motive for learning. If the material is to be learned merely to be recalled under certain circumstances in the precise form in which it was presented, namely, a formal examination, then the child's motive for such learning will be to memorise so that he may offer a more or less faithful recall of the content, a sort of intellectual regurgitation. Since this recall is confined within the schoolroom, such learning may never impinge on life outside the schoolroom. The motive of the teacher *cannot* be the motive of the pupil. However ardently the teacher wishes the experience of the classroom to be part of the life of the child, unless the child's motives are directed, the experience is kept in a closed compartment. For example, the child's syntax and composition assignments may be carefully corrected and analysed by the teacher, but the child during recess and when playing in the street will revert very quickly to the argot of the street. The meaning of any experience is the use to which it is put. Rote learning means accurate recall under restricted conditions. Learning "by doing" means applying experience to problem-solving situations

¹ Cf. Köhler, W., *The Mentality of Apes* (Kegan Paul, London, 1927), p. 219. Köhler seems to imply that "insight" is a learning mechanism. Although the present writer agrees that there is no such phenomenon as "imitation" as commonly assumed, he cannot agree that "insight" is a peculiar function of "intelligent" behaviour, but believes it can be recognised in all learning.

and has come to be the accepted method in modern education ; memorisation and accumulation of content take second place.

The increased growth and complexity of modern life, especially in urban communities, has tended to differentiate between learning in the classroom and learning outside, in the homes and in the community. The one is called a formal and the other an informal learning situation.¹ Formal learning, within the classroom, consists of the presentation of a conventional curriculum combined with an attempt to motivate the child in the direction in which the *teacher* wishes him to go. Informal learning, on the other hand, permits the child to be motivated in the direction in which *he* wishes to go. Thus " walking " and " talking " are two forms of experience which the child usually learns informally. The motive is the desire to move by his own efforts. In the same fashion " talking " is learned informally through the desire to communicate his wants.

It must not be assumed that there are any situations which are exclusively formal or informal. It is largely a matter of emphasis. Within the classroom, where the emphasis is upon formal learning, the amount of informal learning is seldom negligible. Although the teacher may be discussing the rivers of South America during a geography period, none of the pupils is wholly unaware of the teacher's interest or lack of interest, of her personal appearance, of her social behaviour in general. At any moment in the class-period a child, instead of thinking of the Amazon, may be resolving to grow up to be like the teacher, or never to be like that.

Thus, if education is to accomplish the broader purpose

¹ Cf. Blatz, W. E., and Bott, H., *The Management of Young Children* (Dent, London) : Adult Influences—Witting and Unwitting Learning, Chapters VII and VIII.

of preparing the child for social living, (a) the curricular content must be so selected and presented that it can and will be incorporated into the present and future experience of the child, and (b) the educator should possess those qualities and characteristics which we would wish to see incorporated into the child's personality.

In the setting up of formal educational organisation in any community, rules and regulations must be adopted by a body appointed or elected to administer the project. There are certain questions which they must answer.

(1) What is the order of importance of the three factors involved, (a) expense, (b) the immediate needs of the community, (c) the needs of the child ?

(2) At what age should the child (a) begin and (b) end his formal education ?

(3) What are the essential qualifications required of a teacher ?

(4) What status in the community will be given to teachers ?

(5) (The least important of all.) What shall be the content of the curriculum ?

An attempt will be made to answer these questions.

(1, a) In Canada, the United States, and in England there is a wide discrepancy in the annual *per capita* cost of education in communities which are often geographically adjacent. Aside from the differences in cost of living in different areas, this difference in *per capita* cost indicates that education is considered, by the local group, from the point of view of "rates"; that the philosophy of the authority is dictated by the amount of available funds; that a successful administration is one which keeps well within the budget and, if possible, can lower the rates. Thus the child runs the risk of being born in a community in which £4 a year will be paid for his education or

24. At present, the latter will be a better type of education.

(1, b) Education in a great many communities has been organised largely for the benefit of industry. This statement is supported by the fact that many industries require a formal certificate of school-leaving, whether at fourteen, sixteen, or eighteen years of age, for admission to certain types of work. In other words, the school system has been set up as a training device, or rather as a personnel-selection board, for the benefit of a limited group in the community. This aim, of course, may be accepted unthinkingly by many people as the purpose of education. After all, will not these pupils, as they grow up, require jobs? Further enquiry into this situation will show how readily the future of the child may be jeopardised by this vocational emphasis in school systems.

(1, c) Education should be discussed from the point of view of the needs of the child. We should not consider the young child as a labour unit; nor should we be interested in the accumulation of learning as a means of enhancing his social status (intellectual snobbery); nor should we extend or contract the period of formal education to relieve or assist the labour market; but, rather, we should study the *needs* of the child as a potential unit in a future adult community. The emphasis should be placed upon training the child to contribute to the welfare of the whole community, through the development of personal responsibility, not in the narrowest but in the broadest sense. This should be the motive for learning. An educational programme could be tested by asking the child, on the completion of his education, "What are you going to do?" He may answer, either "I will try to contribute my share to the community's activities," or "The world owes me a living; where is it to be got in

the fastest and the easiest way ? ” The reader may guess which answer is given by present-day youth.

The authorities in charge of administration of formal education cannot wholly disregard the cost of education, nor the community interests, but progress in education can come about only if these two considerations are relegated to a secondary position relative to the needs of the pre-adult stage. These needs may be briefly summarised under four headings: health, physical development, education, and recreation.¹

(a) *Health.* There should be no economic bar to the following services needed by all children: pre-natal clinics for expectant mothers; post-natal clinics; measures for prevention of tuberculosis, smallpox, diphtheria, typhoid, etc.; remedial and emergency care for sickness and accidents, and surgical care. It is obvious that the gathering of children into a school provides an excellent opportunity for the health supervision of all children. This is especially true in the Nursery School years, where early supervision and examination pays the biggest dividends. Whatever arrangements are made for such services in future, physical development during the period of youth should not be hampered by the economic restrictions.

(b) *Physical Development.* Aside from the prevention and curing of disease, this century will be known for the beginning of emphasis upon positive health measures. Adequate diet, fresh air, sunshine, and rest are the most imperative requirements. Experience in Britain during the war has again demonstrated that, even in families of intelligence and wealth, a great many children are mal-

¹ Cf. *Curriculum and Examination in Secondary Schools*, Report of Norwood Committee, 1943, pages 66 *et seq* : “ There are three elements which are essential to a good education . . . (i) training of the body, (ii) training of character, (iii) training in habits of clear thought and clear expression of thought in the English language.”

nourished; thus poverty alone is not the cause of this condition. It is apparent today that adequate supervision of the feeding of children (and also of adults) requires a professional skill beyond the powers of the average parent.¹ Communal feeding of children during the war has illustrated what can be done in this connection. Not only is there an economic saving, which could have been predicted, but the resulting increase in weight and height of the children of Britain during the past three or four years has been remarkable. School feeding has come to stay. The suggestion that the assumption of this responsibility by the State disrupts home-life is not born out by the facts.

The importance of fresh air and sunshine need not be stressed, since the construction and architecture of *modern* school buildings take cognisance of this need. Since formal education requires housing during a good part of the day, adequate ventilation is usually provided, but in many of the congested areas the school playground is the only open, sunny place wherein the children may play.

Adequate rest for the children is one of the most difficult services to provide, especially for the younger years. This is especially true of rest during the day. The incorporation of routine-rest periods in the timetable of infant schools is still negligible, but there is a tendency towards this provision which will be most beneficial.

(c) *Education*. No one today questions the need for education, as is indicated by legislation for compulsory education in most civilised countries. There are, however, certain aspects of compulsory education for which universal provision has not been made. First, all children should have an equal opportunity for the *best* education.

¹ Cf. Frank Wokes, *Food the Deciding Factor* (Penguin Books, 1941). Every parent and teacher should read this book.

There can be no justification for an educational programme which reserves special opportunities for special groups. This has been particularly apparent in Britain. No one, unless prejudiced, would suggest that private schools should be done away with. On the contrary, serving as models, the reasonable plan would be to bring all education up to the better standard attained by the endowed schools. Not that the educational philosophy of the "expensive" school is necessarily the best, but in an age where "one gets what one pays for," these schools should be scrutinised for those aspects which are desirable and which are not to be found in the State-supported schools.

The first essential for efficient administration of a school system is the incorporation of a testing programme.¹ The aim, "Equal opportunity for all," should take into consideration the phenomenon of individual differences. This does not mean the "same education for all," as is frequently implied. Chronological age has been accepted as the only criterion for school entrance qualification in a child. As has been pointed out, a number of children of the same chronological age may vary widely in their skills and especially in their potentialities. The need for the adaptation of the educational programme to the child's intelligence seems too obvious for comment. To be sure, in most progressive communities there are special classes for the mentally deficient, the hard of hearing, the blind, and the physically unfit, but these are not the only types under consideration here.

In many regions, early testing of intelligence of all school children is being done. The test results are used, at present, largely for class grading. The educational

¹ Cf. *Our Towns, A Close-up* (Oxford University Press, 1943), page 53. "Steps should be taken to detect dull and backward children at a very early age, to give them special medical and other attention, and to provide separate classes for them in school."

demands upon the child are attuned to his intelligence, in order to avoid two types of discrepancy. In the one too much is expected of the child, and in the other the greater potentialities of the child are given little opportunity for development. The separation of children into different schools at various ages, according to intelligence and interests, is an obvious arrangement. The results of job-analysis demonstrate that a higher measure of intelligence is required, in ascending order, for a labourer, a craftsman, a white-collar executive, a professional man, a teacher, and a research scholar. A great deal of the unhappiness in the world is caused by the discrepancy, plus or minus, that may exist between the individual's potentialities and the requirements of his adult vocation. In order that a testing programme may be most useful, it should be initiated at an early age. The State school system provides the most convenient social technique for making the children available. It is not suggested that the test should be the only criterion for later selection and educational opportunities. On the contrary, it should be combined with other judgements. But an I.Q., assessed by a trained psychologist, is a far more reliable measure than marks in a written examination or a single teacher's judgement—all three should be used in assigning the child to his educational niche. In so far as all children, except the profoundly retarded, may enroll in the Nursery School, a period of three years is available for repeated tests. By the age of five a fairly accurate measure of the child's potentialities should be available.

The arrangements for separating school children into groups should not make any early assignment irrevocable. But by the time the child has reached the age of seven years his accomplishments, interests, and capacities should be accurately known, and a division into at least

two groups, academic and non-academic, should be made at this age-level.

(d) *Recreation.* The educational system must provide for the recreational opportunities of children in two ways.

(i) By arranging for the development of interests in early childhood, so that, later, the leisure-time pursuits of the adult are gratifying. In this connection, mention must be made of the unsatisfactory nature of the emphasis on sports alone as childhood "play." Sports, as physical activities, cannot be indulged in after middle life, when there is usually more leisure time. The more intellectual activities of a sedentary type are developed with great difficulty late in life if the foundation has not been laid in early youth. (ii) By arranging for community equipment for carrying on leisure activities. Playgrounds, community-centres, workshops, play-centres, are more essential than cinemas and amusement parks. Furthermore, there should be some provision for *all* children from the age of ten or twelve years to attend a camp or holiday centre away from home. The benefits derived by the evacuee children visiting rural England cannot be overestimated.

(2) At what age should the child be inducted into the school system? Obviously, if the economic consideration is paramount, this question can be answered by saying that the community cannot *afford* to enrol pupils before the age of six or eight; but if the needs of the child are to be paramount, this question can be answered only after careful enquiry and not by a mere expression of opinion. If one aim of the education of the child is to prepare him for adult life, then the most important skill which he has to learn is the *social* skill. It is a sound principle to initiate a learning programme at the optimum time for learning the skill in question, i.e. when the child is able to appreciate the meaning of his behaviour for later

adjustment (cf. Chapter VII, 3, Training in Elimination). Thus when the child reaches the mental age of two he becomes socially conscious. At this age he should be initiated into a more complicated social structure than the narrow confines of the family. Hence the suggestion that the Nursery School should be an essential part of the school system. The *place* of the Nursery School in modern education will be discussed more fully later, but it must be stated here that the choice of two years as the age for enrolment in a Nursery School is based on as reliable data as the choice of five years of age for kindergarten entrance, six years of age for the beginning of formal reading and writing, and fourteen years of age as a qualification for elementary leaving age. He is a sentimentalist indeed who says, "Two years of age is too young for the child to go to school," for two years of age is not too young to learn to live with contemporaries. Whether the parents of a child of two should be compelled to enrol him in a Nursery School need not be discussed at the present time. There are not enough schools or personnel to staff them at present. If it were left to the children, experience has shown that they would vote in favour of such a compulsion.

(3) "Under what kind of teachers should children learn?" In the past the qualifications of teachers have depended largely on their future economic status in the community. By and large, those who chose teaching as a career considered primarily the salary and the safe tenure of employment. At first glance it may appear as if the qualifications of teachers are determined by an academic certificate, but this is a secondary consideration, because the choice of vocation is made before the certificate is granted. In times of economic depression the quality of the teaching profession rises. If the academic qualifications for admission or certification were

to be raised without adequate monetary compensation, the teaching profession would be depleted.

(4) A secondary factor determining the choice of vocation is the social status of the teaching profession, which is closely related to economic status. No one can deny that the social status of the school teacher is incommensurate with the social contribution which she makes. Mention must be made here, lest there be misunderstanding, of those qualified teachers who, irrespective of salary or social status, have given to the world much more than they have received in material return. The wonder is that there have been so many of this type, although the tragedy is that there are so few. From the point of view of the child's needs, one obvious suggestion towards improving his educational opportunities is to raise teachers' salaries, thereby making it possible to raise the qualifications. (See Chapter XVII, on the description of an ideal teacher.)

Closely related to the qualifications of the teacher is the problem of the size of the class she is expected to teach. A great deal of thought and study has been directed towards determining the number of cubic feet of air-space which the child needs ; towards providing sufficient fire exits ; towards the most economic school building. Some research has also been done upon how many children one teacher can teach *effectively*. If a child learns best by doing, and if the teacher is to be urged to give the child an opportunity to learn, it is unlikely that a teacher of children under fourteen years of age can deal adequately with more than twenty to twenty-five children at one time and in one room. It is certainly true that no teacher can fulfil the teaching function as described in this book with a class of forty-five or more. A roomful of forty-five children is not an educational unit ; it is an economic unit.

(5) What is the basis for selecting the content of a

curriculum? During the first seven years of childhood the actual content of teaching matters little. Most school systems are still "textbook minded."¹ The modern tendency points towards developing in the child a "thirst for knowledge," with the emphasis on the *thirst* rather than on the knowledge.

A modern classroom should not be the "silent" classroom of the older order, with the teacher doing all the talking, but rather there should be a busy hum of activity; secondly, the classroom should be equipped with material to be worked with, altered, and changed, and not the cold, empty, bare room of the past, equipped only with desks, forms, and a few maps; thirdly, the library should be an open shelf of source-books and imaginative literature, available at all times to the pupil, not a pathetic row of outmoded volumes which are never touched or opened. "Textbooks" are no longer considered suitable for young children.

After the age of seven, during which time the curricula *content* is unimportant, except for beginning to learn to read and write, the children should be divided into two groups whose educational destinies are quite distinct. The larger group should be inducted into the arts and crafts with less concern about academic and scientific avocation.

Thus, in answering the five questions posed at the beginning of this chapter, the reader may have had a bird's-eye view of what the future holds out for the coming generations if we, the adults, become interested in the needs of the child rather than in our own comfort.

¹ Cf. Milton, *Tractate on Education*, Facsimile Reprint from 1673 Edition, edited by Oscar Browning (Cambridge University Press): " . . . We have now to hale and drag our choicest and hopefulest Wits to that asinine feast of sowthistles and brambles which is commonly set before them, as all the food and entertainment of their tenderest and most docile age." And this in 1673!

CHAPTER XV

THE NURSERY SCHOOL IN MODERN LIFE

THE Nursery Schools, as institutions, began in several ways : (a) as a way of caring for the children in " under-privileged homes " ; (b) as crèches for children of working mothers ; (c) as devices for teaching retarded and feeble-minded children ; (d) as laboratories for research in child-development ; (e) as educational units for children under kindergarten age. Today the Nursery School must be looked upon not as a charitable institution, nor as an expedient for increasing the number of mothers in industry, nor as a convenience for parents, but rather as a necessary adjunct to child-care and training. There are many aids, e.g. the doctor, the dentist, the tailor, etc., for assisting the parents to administer their responsibilities ; the Nursery School is an additional aid for

TABLE 7
THE NURSERY SCHOOL AS AN AID TO THE HOME

<i>Educational Aims</i>	<i>Nursery School</i>	<i>Home</i>
Serenity		
—Dependent Security . . .		X
—Emotional Control . . .	X	
Conformity		
—Routine . . .	X	
—Social Requirements . . .		X
Co-operation		
—Contemporaries	X	
—Adults		X
Exploration		
—Independent Security . . .	X	
—Physical World	X	
—Ideational World	X	

helping the mother and father to prepare children for a democratic way of living. The Nursery School is neither for the privileged nor the under-privileged, but for both. The Nursery School is not a luxury, but a necessity.

In Table 7 the first column gives in brief the scheme which describes the philosophy of Nursery Education. In the other two columns a cross is placed under the heading of either Nursery School or Home, indicating where the specific training programme can best be carried out. It is not intended to imply, for example, that a child cannot learn emotional control in the home, but rather that Nursery School surroundings provide a better opportunity for such learning. The two columns, Nursery School and Home, are placed together in order to demonstrate that neither can provide a satisfactory educational programme without the aid of the other.

During the first two years of life the home is the best environment for a child, because during this period no other agency has as yet been invented to take the place of good parents. From the age of two years onwards, the child having become a social being (see Chapter VIII), its parents, whether rich or poor, intelligent or not, require the facilities of a Nursery School for their child if they are to succeed in raising a generation of adults who will accept the responsibilities of communal living. No one can deny that, up to the present, we have not succeeded in doing this. It is suggested in this chapter that the philosophy of Nursery School education provides an answer to the problem of training our children for democratic civilisation. A Nursery School may be judged on its merits by the degree to which it achieves the four educational aims mentioned above—serenity, conformity, co-operation, and exploration.

I. *Serenity*

In the School. The Nursery School can and should be serene. The hustle and bustle of modern life is more confusing to a child than to an adult, because he sees no reason for it. This may sound strange when one sees the manner in which the average healthy child moves about quickly, in fits and starts, but this is physical jerkiness; the serenity of the Nursery School is a mental serenity. The child enters school about nine o'clock in the morning, from which time he knows that the problems which he will face throughout the next six hours are within his capacity to deal with. Having learned that he may depend upon the justice and discipline of the school, he knows that he will not meet situations which are chaotic and confusing. The dependent security experienced through the affection and sympathy of his mother remains in the background, and he learns that this relationship will remain inviolate, that none of the adults in the school will presume to usurp the parental rôle in this relationship. He will meet friendliness and consistent consequences. He will discover that his emotional lack of control will not be followed by punishment, but that an emotional outburst will be ineffective as a personal appeal to the adults about him; that his temper tantrums will usually result in disappointment or isolation; that his fears will be dealt with sympathetically.

In the Home. The child in the home during his first two years, through the affection and solicitude of his parents, builds up a personal relationship which depends upon the atmosphere in the home. The importance of this relationship has been stressed in Chapter XIV (on Security). The value of the stability of this relationship cannot be over-emphasised, since the home is responsible for the dependent security of the child. In this connection the duty of the parent, with reference to religious education,

must be stressed. At this period of the child's life, religion in the form of dogma is unimportant. The parent provides his child with an answer to the purpose for living, viz. to enjoy family life. Specific religious education is not stressed during the first five years in the Nursery School, but in the home the parents may use any opportunity for inculcating any "plan" which they themselves practise. They are not justified in teaching anything which they do not fully believe and practise. During this period the child is susceptible to attitudes, but not to concepts.

The home should not be unemotional. The parents can be excited, enthusiastic, jubilant, elated, grief-stricken, or discouraged. Life would be dull indeed if these emotional experiences were denied us. The child reacts to such situations and, with the background of confidence and affection, the child learns that emotional episodes are a part of everyday living and how, through the behaviour of his parents and other siblings, such circumstances should be met. The parents should, of course, recognise that the children should have the same privileges for emotional experience and behaviour. It is not necessary for the parent to be a formal educator. Obviously, the technique for training the child with reference to temper tantrums and untoward fears is exactly the same in the home as in the Nursery School, since it is imperative that the plan should be consistent for the child.

2. *Conformity*

In the School. From the discussion on Discipline in Chapter V it may be understood why "conformity" is used as a term to describe the routine of the Nursery School rather than "obedience." The routine of the day is laid down more or less arbitrarily (see Table 8) and the child is expected to conform—or else. The child has a free choice;

TABLE 8

NURSERY SCHOOL DAILY PROGRAMME ¹*as conducted in St. George's Nursery School in**The Institute for Child Study, University of Toronto***(8.45-9.30 a.m.) Nurse's inspection and entrance routine.**

Before entering the school each child is inspected by the nurse. The parent waits until this has been completed and the child's health pronounced satisfactory. The child proceeds alone into the school.

(9.00-9.30) Elimination routine.

The child proceeds from the nurse's inspection directly to the toilet. Each child makes an attempt to urinate, after which he helps himself to a small glass of water. An adult supervises the procedure, assisting with clothing if necessary.

(9.00-11.00) Outdoor "free play" period.

The child proceeds from the toilet routine directly to the playground. Here he plays alone or with other children, and is free to use any available play materials. There is no separation of age groups. Two adults supervise the playground.

(10.30-11.00) Putting away toys.

Each child is expected to put away at least one toy before going inside. The children are directed indoors two or three at a time.

(10.30-11.00) Cloakroom routine (undressing)

Each child proceeds to his own locker, removes his outdoor clothing, with or without assistance, and puts on house slippers and smock. There are two cloakrooms, a junior and a senior. One adult supervises the older children, two adults assist the younger group.

(10.30-11.00) Elimination routine.

Each child makes an attempt to urinate, flushes the toilet, and rinses his fingers. (In addition to the regular routine periods, a child may be taken to the toilet individually at more frequent intervals. In the case of an involuntary elimination, the child is taken to the toilet immediately and is changed. No comment is made.)

(10.30-11.00) Mid-morning nourishment.

After the toilet routine each child helps himself to one-half glass of tomato juice placed ready at the door of the playroom.

¹ Taken from Blatz, W. E., Millichamp, D., Fletcher, M. T., *Nursery Education, Its Theory and Practice*. Morrow & Co., New York.

(11.00–11.35) Indoor “free play” period.

Each child upon entering the playroom selects his own play material. He is expected to replace this before commencing upon another. Quieter play is required indoors than outside. There are two playrooms, the division of children being made according to age and ability. One adult supervises each playroom.

(11.00–11.35) Washing routine.

Each child is directed individually to the washroom. Not more than four wash at any one time (two junior and two senior children). A definite washing procedure is followed (washing hands, changing water, washing face, drying hands and face, combing hair). The junior children wash at individual basins arranged on a low bench; the seniors use two low wall-basins equipped with running water. Each child is provided with a washcloth, towel, and comb. An adult supervises each group.

(11.00–11.35) Carpentry.

Small groups of three to four children are taken to the workshop at regular periods. An adult supervises the group.

(11.30–11.35) Putting away toys.

Each child is expected to put away at least one toy, after which he may look at a book until the other children are finished. The older group are expected to be responsible for tidying their playroom.

(11.35–11.50) Organised group play.

Books are replaced and the children sit in a circle on the floor. An adult directs the activity. Story periods, including story-telling and reading, “conversation circles,” story dramatising, etc., alternate with music periods, including singing, marching, orchestra, and rhythm practice. A child need not join the activity but is expected to play quietly. Once a week junior and senior groups have a combined music period.

(11.50–12.00) Relaxation routine.

Junior Group.—Each child takes his own rug from an individual cupboard, spreads it on the floor, and lies down. Quiet music is played.

Senior Group.—The children proceed to the sleeping-room, where each child rests on his own bed. A story or poetry is read or a quiet conversation carried on. Each group is supervised by one adult.

(12.00–12.30 p.m.) Dining-room routine.

The children proceed from the relaxation routine to the dining-room. They are directed to their places, three or four children at each table.

Junior Group.—Each child is directed to get his dinner from the central serving-table. Cafeteria service is used throughout the meal, and each child carries his dishes to the serving-table when he is finished.

Senior Group.—The meal is preceded by grace, after which the children sit down and are served by the adult in charge of each table.

In both groups each child proceeds with the meal at his own rate. An adult supervises at each table and has her meal with the children. Cod-liver oil is given as a routine procedure.

(12.30–12.45) Elimination routine.

Upon finishing dinner, each child proceeds to the toilet, attempts to urinate, flushes the toilet, and rinses his fingers. (Only those children who ask, or whose parents request it, wait for bowel movement.)

(12.30–2.30) Sleeping routine.

Each child proceeds to the sleeping-room, goes quietly to his bed, removes his slippers, and lies down (with or without assistance). The children remain in bed until the blinds are put up at 2.30. They then put on their walking-shoes and are directed in groups of two or three to the toilet.

The sleeping-room is prepared (cool and dark) before the children enter. Two or more adults supervise during the first hour; one adult remains in the room throughout.

(2.30–2.45) Elimination routine.

Each child proceeds from the sleeping-room to the toilet as he is directed, attempts to urinate, flushes the toilet, and rinses his fingers.

(2.30–3.00) Dressing routine.

Each child proceeds to his cloakroom locker and puts on his outdoor clothing, with or without help. One or two adults supervise each cloakroom.

(2.45–3.00) Mid-afternoon nourishment

After dressing, each child helps himself to a glass of milk placed on a table near at hand.

(2.45–3.00) Parents call for the children.

This programme is adapted to a Nursery School or Nursery class. At the present time, in England most of the children from two to five years of age are attending war-time Nurseries. Since these were established, in part, to permit mothers to engage in war work, the children are taken to school about 8 or 8.30 in the morning (often by older siblings or friends) and may remain until called for at 6.30 to 7 in the evening. Except for the present emergency, these hours would be inexcusable. These children have no opportunity for family life except over Sunday. The

Residential Nurseries, as the term implies, keep the children for the whole twenty-four hours and sometimes for three years. When the present emergency ceases, it is to be hoped that these institutions will be swiftly demobilised. However skilled and sympathetic the staff (and I have seen some Residential Nurseries with such personnel in charge), no child can develop normally in such an environment.

the requirements are within his abilities ; the consequences are consistent. The child must learn that conformity is not slavery, nor is it uncomfortable. On the other hand, he learns that he may, by conforming, offer his contribution to the community welfare and that, furthermore, by conforming *willingly* he finds that he has more opportunity for non-conformist activities within the limits permitted. The Nursery School equipment is so arranged that the child is not continuously being presented with the symbol of " forbidden " ; the furniture, the rooms, the materials, are all for his use and adapted to his capacities. He discovers that he requires little assistance and can do most things for himself. The appetites may be satisfied through his own efforts and his gratification is interfered with as little as possible. The social requirements such as cleanliness, tidiness, courtesy, and thoughtfulness are unobtrusively included in the routine and are within his comprehension. The virtues of these traits are never stressed, but the consequences are made meaningful. For example, the rule that he should replace the material which he has been using before he selects another may be called tidiness, but he is never told that he must be *tidy*. He learns that, if this rule were not observed, he himself would be inconvenienced. Thus, conformity becomes part of his personality, without resentment and without a spirit of rebellion.

The Nursery School provides the most effective opportunity for supervising the physical health and development of the child and inculcating habits of sound positive

health. The eliminative routine makes for regularity in such habits. Few children of five years of age who have been in a Nursery School since two years of age persist in food idiosyncrasies of a harmful nature. An examination of Chart 3 shows what can be done in a short period of ten months. Of the twenty-three children shown on the chart, eighteen were below the average weight upon entrance to the school. After ten months of regular meal-times, supervised diet,¹ and regular rest periods, all but three gained more during this period than the average child of their age, and all but these three are now above average in weight for their age. One of these has been found to be a T.B. suspect. Another has had a difficult home routine during the past six months. The cause of the slowness of the third is unknown as yet, but she is under observation.

The fact that the children were underweight is no indictment of the parental care of these children. No home can compete with the facilities available in a modern Nursery School for giving children the important meal of the day.

Due to the efforts of Dr. Beaumont and Miss Ingram, all the children at Garrison Lane Nursery School have been immunised against diphtheria, all but one have been vaccinated, and all but three have been given the vaccine against whooping-cough.

In the Home. It is difficult for any home to provide a physical environment which is wholly adjusted to the child's size and scale of capacities. To be sure, there may be small chairs and tables available, but the home, after all, is an adult institution. There are many things—the father's papers, the mother's work-box, and the older brother's and sister's desk-drawers—which are taboo.

¹ Acknowledgement is hereby made to Miss Mann, of the Birmingham Education Department, for the time she spent and the care which she showed in supervising the preparation of the food in the British Restaurant adjoining the school.

The child, of course, must learn to respect these, but, after all, a continual environment of this sort becomes rather oppressive towards the end of the day. One would not wish a home to be arranged as a Nursery School, because the home *is* an adult institution; the family remains an adult social organisation much longer than a home for children. Making a home for the children is an obligation of the family, but not the only one. The home is the most important agency for developing the attitudes of the child towards the social customs and traditions. The home sets the *standard* of cleanliness, æsthetics, courtesy, thoughtfulness, and so on. (The home is a much more powerful agency than the school or Church, as witness the persistence of the local accents. No matter what the accent of the teacher, the child speaks according to sounds which he hears in the home.) No matter what the atmosphere of the school, the social standards are set, in the first two decades, by the home itself. These standards are remarkably persistent in after life.

3. *Co-operation*

In the School. The average individual spends not more than a quarter of his life in his own family. Marrying at twenty years of age, he spends the other three-quarters in a much more intimate relationship with another family. Hence, although it is important to be able to live comfortably with one's own family, it is far more important to be able to live pleasantly with a member of another family. The later three-quarters of our lives we spend usually with our contemporaries. We mix with other generations, but not usually in intimate contact. We usually choose our friends from our contemporaries. Since the most effective learning results from *doing*, it is obvious that as soon as the child becomes aware that he is "social" he

should have an opportunity of practising social behaviour among his contemporaries. For a child of two years of age his contemporaries must not vary by many months. Social distances between the ages of two and four are as great as between the ages of twenty and forty years, so that the two-year-old should have a group of two-year-olds with which to live for a short time. He practises, here, those patterns which are successful in gratifying his social wants as illustrated in Chapter VIII (on Social Development). There can be no adequate substitute for such an opportunity to learn. His contact with older children of three and four, in the school, provides an opportunity for unwitting learning, so that there is a stimulus towards social growth which is often interfered with in the home. By the time the child is five, having had three years' practice, he has developed, to a remarkable degree, social habits which will stand him in good stead during his later life. Nursery School children are seldom shy, timid, or retiring towards other children. On the other hand, they are seldom cruel, bullying, or unkind. The co-operation with adults which the child learns in the Nursery School rests on the basis of the relationship between authority and conformity. He learns that the adult in authority never misuses it. He learns that he cannot use the difference in size between himself and others unfairly to gain an advantage. He must earn his status in the community and not expect it to be granted without effort. He learns that his achievements are interesting to the adult only as part of an educational scheme and that in the group there is no preferential treatment.

In the Home. Even in large families the children are so spaced in age that there are only few contemporaries, even in the case of twins and triplets. The only family group which approached, to some extent, the Nursery

School arrangement was the quintuplets. This family group, with which the writer was associated, proved the value of contemporary companionship, as the development of these five children in their Nursery School years showed.¹

It is impossible for any parents to avoid stressing the differences in the ages and abilities of their own children. However fair and just, there is a favourite, usually the youngest, often the first-born, especially if it is a son. As first children grow older they receive special privileges denied to the younger ones. Often these privileges are granted because of age and not because of the acceptance of responsibility (witness the bedtime rules). Special favouritism is often manifest when one child is at a physical disadvantage to the other—the crippled child, the retarded or disfigured child. A characteristic of advancing civilisation is the affection that most parents, especially mothers, show towards children of this kind. Civilisation will be doomed if mothers and fathers discriminate against the weaker.

In the home the parents and the older children are expected to make sacrifices for the younger. Sacrifice is the prerogative of the parent. In this way human sympathy is engendered in the child, not towards the older, but towards the younger. Advice was given in the section on Sex Education how, in this connection, the parent can develop in the child a sense of the sanctity of later intimacies. The Nursery School cannot adequately provide this aspect of training and should not attempt to do so.

4. *Exploration*

In the School. Although a child has already begun to develop independence in the home during the first two

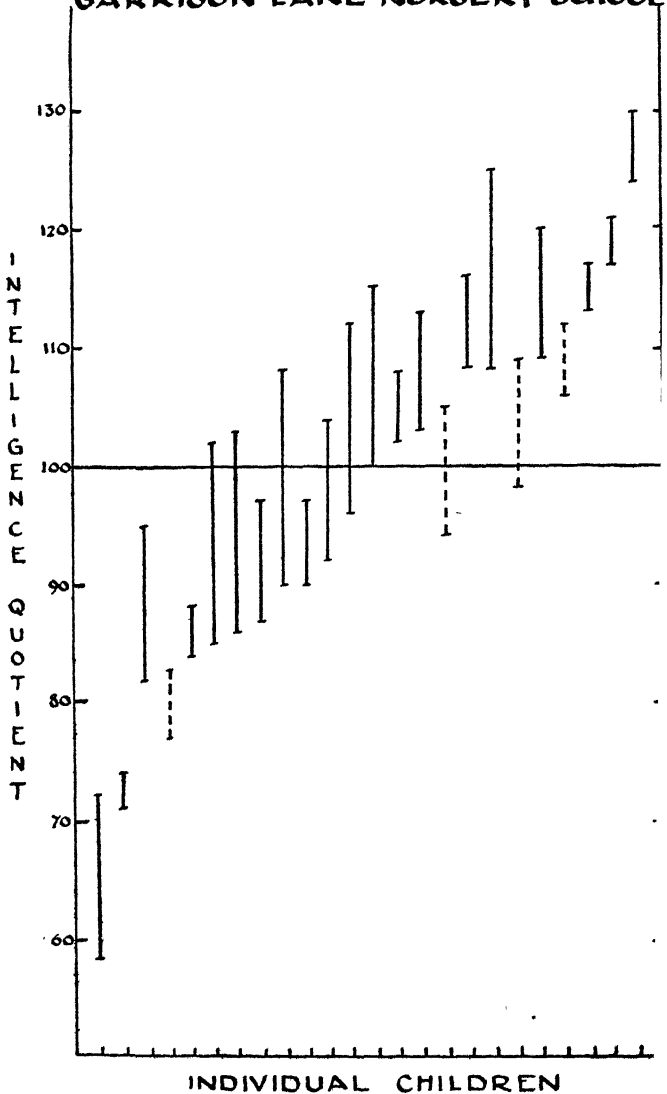
¹ Cf. Blatz, W. E., *The Five Sisters* (1938, Dent, London).

years, it is during the three years in the Nursery School that he has an opportunity for developing independence far more readily than in the home or out of it. Having conformed to the essential rules of the school, the child, through his activity, is permitted infinite opportunity for exploring new experiences and new ways of gaining experience. There are no limits set to his ingenuity and manipulative activity. There is no prohibition laid down for the use of materials except destructiveness. There are no models set for his painting, sand-moulding, and block-building. In the same way no limit is marked out for his fantasy in the doll-centre, in the story-hour, or in outdoor play. He is never hindered in developing his own resources. His social contacts are his own choices. No child is forced to play with another child, nor is he denied the opportunity of associating with anyone. His own behaviour will determine whether he is accepted or not. Thus, the child, in the atmosphere of freedom of choice, can develop an appreciation of his own achievements. He may compare his efforts with others, but never on the basis of enforced competition. He may share his ideas with others and with the adults without fear of ridicule or inhibition. He may make his own rules for play and then break them if he wishes to. He may attempt to enforce these rules on others, his success depending only upon the degree of his own persuasiveness. He cannot appeal to adult authority to assist him in this situation. In this fashion the child becomes increasingly independent within the framework of a pleasant social community.

As mentioned above (Chapter IV), the capacity of a child is innate but abilities must be developed through experience. The number and excellence of his skills depend upon the opportunities afforded him for exploiting his capacity. In an arid, sterile environment the

CHART 4

INCREASE IN I.Q. VALUES DURING ATTENDANCE AT GARRISON LANE NURSERY SCHOOL



capacities remain dormant ; in a rich, stimulating environment his capacities flourish into abilities. Chart 4¹ shows that, during the ten months spent in the Nursery School at Garrison Lane, twenty out of twenty-four children (there are forty-five in attendance, but only twenty-four have been enrolled for ten months or more) showed a remarkable increase in I.Q. value. The number of children with I.Q.s over 120 in this community is revealing in its implication that these children are sufficiently intelligent to benefit from a University training. It must be kept in mind that the Nursery School procedure does not increase the *inborn* capacity, but it does permit the child to develop his capacity to the full. The salvage of undeveloped capacities is as important to a country at war or at peace as the salvage of rubber, bones, and paper.

In the Home. There are many homes which provide a rich cultural environment, filled with beauty, intelligent conversation, well-filled library shelves, trophies of travel, and interesting visitors. The child is fortunate who is born into such a family. There are many homes in which such opportunities are wholly absent. Moreover, an adult requires a good deal of training in order to refrain from *inhibiting* a child's learning. Rules and regulations become traditional and, although adapted to an adult world, seldom take into consideration the fetters which they place about the child's exploratory impulses. To the child, in such circumstances, the Nursery School must be a heaven indeed, not only because of the opportunities for physical exploration, but also for the enjoyment of a period of unhampered thinking. When we consider how many new experiences may be lived through during the

¹ This chart was prepared from the routine tests given in Garrison Lane Nursery Training School by Miss Mary Wright, M.A., to whom acknowledgement is made.

first five years, especially from two to five years, one cannot help but deplore the lost opportunities for the mass of children whose lives between these ages are sterile and confined. The community provides opportunities for the later years—libraries, museums, zoos, theatres—but the two to fives can make little or no use of these.

Thus it has been shown that it is not a question of choice of "Nursery School" or "home" for the child, nor that one is better than the other, but rather how desirable, nay, how necessary it is¹ for the child from two to five years of age to have an opportunity of attending a well-run Nursery School and living in an ideal home. The Nursery School, as stated above, is an aid, not a substitute for the home.

It remains after this to state, briefly, the qualifications of a good Nursery School teacher. First, she should be serene while in the Nursery School. This can be accomplished only by acquiring skill in her profession. Self-confidence and unhurriedness come from knowledge and successful practice. She must have learned emotional control while she is dealing with children. She must refrain from emotional attachment to these children; after all, they are not her own. She will have developed a degree of adult independent security, so that she need never be thrilled by the authority which she exercises in the school. She must have acquired an attitude towards conformity which accepts rules and regulations as the necessary conditions for disciplined living. Her attitudes towards social requirements should be easy and not compulsive. Tidiness, cleanliness, etc., are a part of her

¹ Cf. *Educational Reconstruction*, Board of Education, July 1943, page 8: "It is now considered that the self-contained Nursery School, which forms a transition from home to school, is the most suitable type of provision for children under five. Such schools are needed in *all* districts, as even when children come from *good* homes, they can derive much benefit, both educational and physical, from attendance at a Nursery School." (Italics ours.)

personality and not a virtuous necessity. She must learn to co-operate with her contemporaries on the staff as well as outside the school. She should have a sufficient number of contemporary intimates in her social life to make it gratifying to her. Her attitudes towards her superiors should be the same as she expects from children. She should have developed sufficient independent security so that her attitude towards her work and her convictions are not fixed—but she should look upon new ideas and new suggestions with healthy scepticism. She should be unafraid to carry on with the old techniques and to reject the new if found unsuitable, but also to reject the old if they are outworn and accept the new as an experiment.

Such a Nursery School teacher would be ideal. They can be trained to this standard if proper facilities are provided. Chronological age, motherhood, academic achievement—these alone are not sufficient qualifications.

CHAPTER XVI

PARENT EDUCATION

MOST parents are resolved to do the best they can for their children.¹ A conscientious parent, intent upon the task of raising children, must be moralist, psychologist, educator, philosopher, theologian, physician, nurse, and dietician, in addition to being a father or mother. It seems an impossible task. Unassisted, a parent today *would* be undertaking an almost hopeless task, *but* there are many aids to parenthood, even though there are no substitutes.

To safeguard the physical and mental health of the child is the first duty of the parent. Alleviation of pain and administration during illness are obvious responsibilities, but the task is more onerous than these relatively simple duties. Without the assistance of a physician the ordinary lay remedies would be, in many cases, inadequate, so the parent calls in the doctor. The feeding of the child is not a simple task. It is not merely a question of giving the child "enough" to eat. The selection, preparation, and serving of food has now become an intricate skill. The feeding of children in war-time Britain has shown up the shortcomings of peace-time arrangements. The parent should have recourse to the dietician as a helper.² The training of the child in emotional

¹ Cf. Sir G. Ellhott Smith, *In the Beginning : the Origin of Civilisation* (Thinker's Library · Watts & Co, London, 1937), page 22. "But the essential link in the primitive family group is consideration for the children's welfare" The child had to wait for civilisation before societies for the prevention of cruelty to children were invented and anti-child-labour legislation brought in!

² Cf. *Our Towns : a Close-up* (Oxford University Press, 1943), page 46: "Parents should be drawn into the efforts of the school to induce sound habits of dietary and skill in the planning and preparation of economical, well-balanced, and varied meals."

control, self-confidence, and social adequacy is a still more difficult task for the unaided parent. The teacher and the psychologist can afford some relief and assistance in this important duty.

Parental responsibility resembles, in part, that of the physician, to cure the child, prevent injury, and promote sound health. It is interesting to glance at the changes which have taken place in the outlook of the medical profession during the past century. The history of the profession of medicine may be divided into three aspects, therapeutics, prophylaxis, and promotion. There is undoubtedly some overlapping. Therapeutics, the curing of the sick, is an *art*; the patient, interested in the alleviation of his distress, is not intrinsically interested in the means, whether by drugs, surgery, or the laying-on of hands. Prophylaxis, or the prevention of disease, is, however, an application of *scientific* discoveries to human welfare. To be successful, a preventive measure must be based upon demonstrable experimental proof, e.g. typhoid fever is no longer prevalent in modern civilised communities, because it has been demonstrated that this disease is caused by the ingestion of a large number of *Bacilli typhosus*. By boiling or otherwise treating water and food, organisms causing the disease are destroyed and the community is saved from the inconvenience and distress of an epidemic. Promotion of physical health is the latest interest in human welfare. To undertake a promotion programme, a *standard* must be approved. Apparently, the modern community is interested in taller, heavier, and stronger individuals. Diet, fresh air, sunshine, rest, etc., prepare the way to a realisation of these ideals.

In the mental field of human welfare the same three aspects may be discerned, but the latter two are much more recent in growth than in the physical realm. The

treating, if not the "curing," of mental disease goes far back in history, but only recently have there been sufficient demonstrable data upon which to base a sound therapeutic method. Dr. Sigmund Freud contributed, during his lifetime, to the establishment of a more effective method of treatment of mental disease than anyone before him. That there should be criticism of his theories and of some details of his practice is inevitable; he was a pioneer. The structure of his system will be greatly modified by the accumulation of knowledge concerning human behaviour, especially in the field of child psychology, but his work will stand as a tribute to his efforts. Psychotherapeutics is an *art* largely dependent upon the personality of the psychiatrist. Mental hygiene is, on the other hand, a prophylactic device, dependent upon the results of *scientific* research in psychology. A complete plan for the prevention of nervous and mental maladies awaits further scientific research, which has not, as yet, been sufficiently subsidised to make a major contribution. The promotion of mental health awaits definition. Who is a normal person?—besides oneself! At present, we can submit only tentative suggestions in the latter two fields.

However, since children are born and must grow up, we cannot wait for science to give us *complete* answers to the many problems of child-rearing before we develop a plan which, incorporating some of the acceptable facts and theories, may help us to train children to assume more adequately the responsibilities of adult life.

Parents are expected to rear their own children (and often, in these days, other people's children), and the results of modern research and study may be presented to them in such a way that they may make use of this knowledge to prevent the more obvious mental maladies and also to promote a healthier mental outlook. If parents fail to accomplish this task, there is no other

agency which can operate so effectively. Clinics, psychologists, psychoanalysts, or psychiatrists might cure, but the direct task of prevention and promotion is beyond them.

"Parent education" is the term applied to a plan for teaching parents how to fulfil the more important obligation of parenthood, the rearing of children.

It is surprising that this task has never been seriously undertaken through formal channels of education. The "folklore" method, which at best is a haphazard technique, has, in the past, been considered adequate. Grandparents, whose responsibilities are largely over, often become the fountainhead of knowledge concerning the care of the new generation. Today, parent education is considered an important adjunct of the education of the young. Progress has been slow because traditional methods of formal education have proved inadequate. The *application* of these methods, by the parent, in the home, is the major consideration rather than the mere teaching of knowledge. This chapter suggests possible methods in parent education which may be organised in a community and urges the promotion of much-needed research in this field.

Both parents should share in the responsibility of child-rearing, and although, in the child's early years, much more of the actual administration falls to the lot of the mother than to the father, responsibility is shared by both. Agreement between the parents on the accepted plan of training is essential for consistency. Differences of parental opinion are bound to make it difficult for the child to learn to conform on the one hand and enjoy his freedom on the other. Quite often one or other parent assumes, or is granted, the rôle of a Supreme Court Judge, who, may reverse the decisions of the "lower court," or of Appeal Judge, from whom the child expects

"justice" or "equity" to correct the decision of the other. Often the father is expected to act as executioner; the threat, "Wait 'til your father comes home, and I'll tell him what you have done," is unfair to both father and child. The following story is piquant, but illuminating. A small boy, after some misdemeanour, was told that his father would punish him on arrival home from work. At six o'clock the father was told by the mother that he had to "chastise" his son. Reluctantly, and with a "peace-at-any-price" attitude, he sought out the culprit, but could not find him. Remembering his own youth, he looked under the bed and saw his son crouched in the farthest corner, so he started to crawl under the bed to bring him out into the room, but was startled to hear the boy whisper, "What is it, Daddy? Is she after you too?"

Differences of opinion arise, not because either parent has in mind a well-formed plan of training children, but because *neither has a plan at all*. Each tries to carry on under the influence of childhood memories and suggestions from relatives or friends, so that clashes of opinion often arise because each is defending an indefensible position, from which retreat is impossible without exposing ignorance or prejudice. The unenviable position in which the "mother-in-law" finds herself in song and story may be traced to the "arguments" which arise over child-training.

No more salutary, convenient, or satisfying method for child-rearing can be suggested than the existing family organisation. The rôle of parent is unique. No other agency can give to the child the background of "belonging" as successfully as a parent. Affection without sentiment, authority without cruelty, discipline without aggression, humour without ridicule, sacrifice without obligation, companionship without possessiveness—these

parental traits should constitute "mother-love"¹—and "father-love." In no other social situation does one member contribute to another so that someone else will enjoy the fruits of her labour. The rôle of mother offers the greatest opportunity for demonstration of the highest ideals of civilised life. That so many mothers still persist in trying to fulfil this rôle in the face of wars, pestilence, revolutions, and racial oppression is a tribute to them and the one steadfast hope to which humanity may cling. The rôle of father partakes of the same characteristics, but with different emphasis.

In the past the family organisation has been taken for granted. The successful family has been considered the rule rather than the exception. The increase in social knowledge proves that child-rearing has been woefully neglected. Intelligent parents are seeking help in rearing their children. Parents who have attended parent-education groups have shown a remarkable interest in learning about children. Of course, no plan of education can be expected to inculcate the qualities of parenthood stated above, any more than the school teacher can inculcate "character" through formal courses, but a course in parent education can point out successful methods of administering discipline, encouraging independent security, and fostering healthy social attitudes in children.

Parent education cannot be accomplished by giving a "course" or "series" of lectures. A more comprehensive plan should be envisaged, such as follows.

(1) There should be available, attached to each secondary school district, a demonstration Nursery School in which the youth, both girls and boys, of fifteen to seventeen

¹ The writer may be forgiven for including here a tribute to his own mother. A cable announcing her death arrived while this chapter was being written. As the youngest of her nine children, the writer, brought up in a home almost always full of young people of all ages, acquired an interest which has become his vocation.

years of age should spend some time, under supervision, practising the philosophy which is taught didactically in the classroom. In this fashion, both boys and girls may become interested in the problems of child-care and their solution. To be sure, many of the children will already have had such duties thrust upon them through having to "mind" their younger brothers and sisters. Such duties, through proper training, could become less onerous, more interesting, and profitable.

(2) The establishment of pre-natal clinics in every community places greater emphasis upon the care of the expectant mother. There is ample opportunity for incorporating into the outline for physical care a good deal of advice on the psychological care of the nought to two-year-old child.

Lectures and demonstrations could very well be included in the other services already afforded. Of course, provision for more adequate staff and premises would have to be made.

(3) Parent education can best be arranged while the children are attending Nursery School. Parent-education meetings in a school, however, should not be restricted to the parents of children actually in attendance, but expectant mothers and mothers of younger infants living in the district should be invited and urged to attend. The first two years of the child's life are just as important as the next three. In this fashion, co-operation could be established between the school, the home, and the health authorities. During the period in which the child attends the Nursery School—namely, from the ages of two to five—a series of ten to twelve fortnightly (evening) meetings for parents are arranged each year. These meetings may include talks by the staff of the school, but are more profitably conducted as discussion groups led by a teacher. The parent is expected to spend at least one whole day in

each term observing in the Nursery School, so that she may become familiar, not only with the daily school routine, but also can observe how her child is fitting into this novel social environment. Private discussions between parent and teacher, on an educational rather than a clinical basis, help to solve many of her problems. The records which are kept in any well-organised Nursery School may be used (anonymously, of course) to point out to a parent what may be expected of her child and, if necessary, that better results may be obtained from fuller co-operation. An instance of this occurred recently at Garrison Lane Nursery School. A mother of a child whose attendance was unsatisfactory was shown, by a chart, the progress which was being made by the children whose attendance was regular. It was pointed out to her that if she expected her child to derive full benefit from the Nursery School opportunities, she would have to put forth more effort to get the child to school, since he was too young to accept this responsibility himself. It was interesting to note that the child came more regularly and that the father, for the first time, began to attend parent-education classes. The school psychiatrist should be available at regular periods for discussion and advice on more serious cases.

Parent education, during the later years of youth, need not be as time-consuming for the parents as during the pre-school years. The senior and continuation schools have much more curricular significance than in the Infant and Nursery Schools and the teaching becomes more formal. It is unnecessary for the parent to know, in detail, the technique of teaching reading, geography, or science, any more than she could be expected to understand the detailed technique of the nurse, physician, or dentist, but regular parent-education meetings should be a part of the education system from infancy throughout

adolescence. A philosophy of training should apply not only during the early years, but throughout life. Problems which will arise in later stages of development may be discussed and methods of dealing with such problems may be suggested by a person trained in such methods.

The content of parent-education classes is changed from year to year as new members are inducted, but the philosophy of training remains the same. Suggested topics for an initial course for one year are appended.¹

1. Why Study our Children ?
2. The Appetites and Habit Formation.
3. Habits of Eating.
4. Habits of Sleeping.
5. Habits of Elimination.
6. Habits of Play.
7. Sex-training.
8. The Nature of the Emotions and Attitudes.
9. The Fears of Children.
10. Temper Tantrums.

¹ Cf. Blatz, W. E., and Bott, H., *Parents and the Pre-school Child* (Dent, London). An outline of the ten "discussion" topics comprises Part I of this book.

CHAPTER XVII

THE PRODUCT

WE must now return to the question posed in the first chapter, "What kind of an adult do we wish to have?" Although "the child is father to the man," we cannot expect him to behave in as mature a manner as his father until he has gained adult stature.

During his childhood many opportunities will be afforded for judging whether the training programme is progressing satisfactorily, but we must revise our methods of testing. No longer will we be satisfied with a brief or even lengthy school or clinical report, consisting of his examination marks and/or superficial opinions of his teachers that his conduct is "satisfactory" or "unsatisfactory." Either judgement may be misinterpreted. A child who accepts too literally the restricting influence of a conformist school may be marked "satisfactory" by the teacher, but cannot be considered to have made a satisfactory adjustment; whereas a boy marked "unsatisfactory" may be showing evidence of a salutary adventurous spirit.

We can no longer expect young children never to lie, steal, or indulge in vulgarities, etc. We know that these are "failures" which he commits in the early stages of his learning programme, and so we are not nonplussed when these failures appear in early life.

Perhaps the time has come to put the shoe on the other foot. Why not test the parents and the teachers with such questions as follows?—

(1) Have you provided the child with a sufficient variety of materials so that he can be busily engaged during his leisure time?

(2) Have you provided for regular periods during the day for uninterrupted activity?

(3) Have you arranged a regular routine for appetitive enjoyment, so that he may learn to conform without resentment ?

(4) Have you provided for his early growth of independent security ?

(5) Have you kept faith with him by arranging a consistent, just, and reasonable discipline under which he can live securely ?

(6) Have you provided a sufficiently varied social environment of contemporaries, so that he may learn to live with his fellow-man, without wanting to dominate ?

(7) Have you so organised your life that your own achievements are gratifying and hence you find it unnecessary to seek fulfilment in specious appreciation of your child's performances ?

(8) Have you enquired carefully into your child's capacities, so that you may not expect too little or too much of him ?

(9) Have you developed a sufficient variety of interests outside of child-training, so that—(a) you are never bored with your responsibilities, or (b) too fault-finding and impatient towards the child's efforts ?

(10) Can you honestly hold yourself up to the child as a model of emotional self-control, tolerant social co-operation, and philosophical humility ?

If you, teacher or parent, can answer these ten questions in the affirmative, *then* you will never have to worry about your child or any children under your care. On the other hand, if any of the questions are answered in the negative, the child under your supervision will be handicapped by that much in his progress towards adequate adult adjustment. At the present time the only unequivocal advice which may be given to parents and teachers is, " Be kind to him in his failures ; the teaching technique is usually at fault."

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